

## Research Terms of Reference

Integrated Public Health Rapid Assessment (IPHRA) in Old Fangak, Fangak County

SSD2406

South Sudan

February 2025

V1

### 1. Executive Summary

<b>Country of intervention</b>	South Sudan						
<b>Type of Emergency</b>	<input checked="" type="checkbox"/>	Natural disaster	<input checked="" type="checkbox"/>	Conflict	<input type="checkbox"/>	Other ( <i>specify</i> )	
<b>Type of Crisis</b>	<input type="checkbox"/>	Sudden onset	<input type="checkbox"/>	Slow onset	<input checked="" type="checkbox"/>	Protracted	
<b>Mandating Body/ Agency</b>	FCDO						
<b>IMPACT Project Code</b>	32FOD						
<b>Overall Research Timeframe</b>	03/02/2025 to 09/04/2025						
<b>Research Timeframe</b>	1. Pilot/ training: 20/02/2025			6. Preliminary presentation: 14/03/2025			
	2. Start collect data: 22/02/2025			7. Outputs sent for validation: 26/03/2025			
	3. Data collected: 04/03/2025			8. Outputs published: 9/04/2025			
	4. Data analysed: 12/03/2025			9. Final presentation: NA			
	5. Data sent for validation: 13/03/2025						
<b>Humanitarian milestones</b>	<b>Milestone</b>			<b>Deadline (can be tentative)</b>			
	<input checked="" type="checkbox"/>	Donor plan/strategy			ASAP		
	<input checked="" type="checkbox"/>	Inter-cluster plan/strategy			ASAP		
	<input checked="" type="checkbox"/>	Cluster plan/strategy			ASAP		
	<input type="checkbox"/>	NGO platform plan/strategy					
<b>Audience Type &amp; Dissemination</b>	<b>Audience type</b>			<b>Dissemination</b>			
	<input checked="" type="checkbox"/>	Strategic			<input checked="" type="checkbox"/> General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors)		
	<input checked="" type="checkbox"/>	Programmatic			<input checked="" type="checkbox"/> Cluster Mailing (Education, Shelter and WASH) and presentation of findings at the next cluster meeting		
	<input type="checkbox"/>	Operational			<input checked="" type="checkbox"/> Presentation of findings (e.g. at HCT meeting; Cluster meeting)		
	<input checked="" type="checkbox"/>	Advocacy			<input checked="" type="checkbox"/> Website Dissemination (Relief Web & REACH Resource Centre)		

<b>Stakeholder mapping</b>	x Yes	<input type="checkbox"/> No
<b>General Objective</b>	<i>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 Old Fangak, Fangak County.</i>	
<b>Specific Objective(s)</b>	<p><b>Population Demographics</b></p> <ul style="list-style-type: none"> <li>• <i>To understand the demographic composition of the target population.</i></li> </ul> <p><b>Health</b></p> <ul style="list-style-type: none"> <li>• <i>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)</i></li> <li>• <i>To understand the main barriers for the target population in accessing health and nutrition services.</i></li> <li>• <i>To assess the availability and functionality of health and nutrition facility services.</i></li> <li>• <i>To estimate the coverage of Vitamin A supplementation among children 6-59 months of age</i></li> <li>• <i>To estimate the coverage of measles vaccination among children 9-59 months of age</i></li> <li>• <i>To estimate the coverage of oral cholera vaccinations among people 5+ years of age</i></li> </ul> <p><b>Food Security &amp; Livelihoods</b></p> <ul style="list-style-type: none"> <li>• <i>To estimate the proportion of the target population experiencing food consumption gaps, both in terms of quantity and diversity.</i></li> <li>• <i>To estimate the proxy coverage of emergency food security interventions in the target population.</i></li> <li>• <i>To understand the availability and utilization of food at the household level.</i></li> <li>• <i>To understand the main barriers for the target population in accessing food.</i></li> <li>• <i>To estimate the proportion of the population using livelihoods based coping strategies to access food, or other basic needs, and their severity.</i></li> </ul> <p><b>Water, Sanitation, and Hygiene</b></p> <ul style="list-style-type: none"> <li>• <i>To estimate the proportion of the population experiencing water consumption gaps, both in terms of quantity and quality (Liters per person per day, main source of drinking water).</i></li> <li>• <i>To estimate the proportion of the population with access to improved sanitation facilities</i></li> <li>• <i>To estimate the proportion of the target population with access to handwashing facilities with soap and water in their dwelling/yard/plot</i></li> <li>• <i>To estimate the proportion of the target population practicing daily hygiene management</i></li> </ul>	

	<ul style="list-style-type: none"> <li>• <i>To understand the main barriers for the target population in accessing water.</i></li> <li>• <i>To estimate the proportion of households with access to basic WASH NFIs.</i></li> </ul> <p><b>Shelter and NFIs</b></p> <ul style="list-style-type: none"> <li>• <i>To assess the main shelter types being used by the population.</i></li> <li>• <i>To assess the prevalence of shelter damage among the population.</i></li> <li>• <i>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.)</i></li> </ul>
<p><b>Research Questions</b></p>	<p><b>RQ1 - What is the demographic composition of the population?</b></p> <ul style="list-style-type: none"> <li>• <i>RQ 1.1 – What is the sex and age distribution of the assessed population?</i></li> </ul> <p><b>RQ2 – What is the severity of health needs and service gaps in the population?</b></p> <ul style="list-style-type: none"> <li>• <i>RQ 2.1 - What proportion of the population is experiencing unmet healthcare needs in the two weeks prior to data collection?</i></li> <li>• <i>RQ 2.2 – How do these unmet needs differ by sex, age, and symptom?</i></li> <li>• <i>RQ 2.3 – What are the self-reported perceptions of health needs and access to care in the assessed population?</i></li> <li>• <i>RQ 2.4 – What are the availability of services at health facilities serving the assessed population?</i></li> <li>• <i>RQ 2.5 – What if any gaps are there with human resources, infrastructure, supplies, equipment, and WASH environment of health facilities serving the assessed population?</i></li> <li>• <i>RQ 2.6 – What proportion of children 6-59 months have received Vitamin A supplementation in the last 6 months?</i></li> <li>• <i>RQ 2.7 – What proportion of children 9-59 months have received any measles vaccination?</i></li> <li>• <i>RQ 2.8 – What proportion of people 5 years and older have received any cholera vaccination?</i></li> </ul> <p><b>RQ 3 - What is the severity of food security and livelihood needs and service gaps in the population?</b></p> <ul style="list-style-type: none"> <li>• <i>RQ 3.1 – What is the proportion of households in the assessed population experiencing food consumption gaps in terms of quantity and diversity?</i></li> <li>• <i>RQ 3.2 – What are the self-reported perceptions of food needs in the assessed population?</i></li> <li>• <i>RQ 3.3 – What is the household coverage of emergency food security interventions in the assessed population?</i></li> <li>• <i>RQ 3.4 – What are the main sources of food utilized by the assessed population in the last 7 days?</i></li> <li>• <i>RQ 3.5 – What are the main sources of water and fuel utilized by households for cooking in the assessed population?</i></li> <li>• <i>RQ 3.6 – What are the main sources of income of the assessed population in the last 30 days?</i></li> <li>• <i>RQ 3.7 – What proportion of households in the assessed population are utilizing stress-, crisis-, and emergency-level livelihoods coping strategies to access food and other basic needs?</i></li> </ul>

	<ul style="list-style-type: none"> <li>• RQ 3.8 – <i>What is the availability of critical food and non-food items within markets used by the assessed population?</i></li> <li>• RQ 3.9 – <i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i></li> </ul> <p><b>RQ 4 – What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?</b></p> <ul style="list-style-type: none"> <li>• RQ 4.1 – <i>What proportion of households have access to safe, improved drinking water in the assessed population?</i></li> <li>• RQ 4.2 – <i>What proportion of households can collect water within 30 minutes, including travel to, from, and queuing time?</i></li> <li>• RQ 4.3 – <i>What kinds of water treatment methods are households in the assessed population using?</i></li> <li>• RQ 4.4 – <i>What are the self-reported perceptions of water needs and barriers to access in the assessed population?</i></li> <li>• RQ 4.5 – <i>What proportion of households in the assessed population have access to improved sanitation facilities?</i></li> <li>• RQ 4.6_ <i>What proportion of households in the assessed population have access to handwashing facilities with soap and water in their dwelling/yard/plot?</i></li> <li>• RQ 4.7 – <i>What proportion of households in the assessed population have access to basic WASH NFIs, such as water containers, soap, and mosquito nets?</i></li> </ul> <p><b>RQ 5 – What are severity of the Shelter and NFIs needs and service gaps in the population?</b></p> <ul style="list-style-type: none"> <li>• RQ 5.1 – <i>What types of shelter are the assessed population living in?</i></li> <li>• RQ 5.2 – <i>What are the self-reported perceptions of shelter and NFI needs in the assessed population?</i></li> </ul> <p><b>RQ 6 – What are the community’s self-perceived priority needs and humanitarian assistance?</b></p> <ul style="list-style-type: none"> <li>• RQ 6.1 – <i>What are the self-reported priority needs for the population?</i></li> <li>• RQ 6.2 – <i>Are there any perceived safety concerns for the assessed population?</i></li> </ul>
<b>Geographic Coverage</b>	The assessment aims to collect data from Old Fangak town of Old Fangak Payam, Fangak County in Jonglei State.
<b>Secondary data sources</b>	REACH: <a href="#">Fangak shocks verification missions</a> , Jonglei state, South Sudan, June 2021 UNMISS: <a href="#">Thousands of families flee rising waters in Fangak as extraordinary flooding hits South Sudan</a> , September 2024. Radio Tamazuj: <a href="#">Thousands flee Fangak villages over floods</a> , August 2024 IRNA Report: Fangak County, Jonglei State: September 2024 On file with REACH. South Sudan CCM Cluster: IDP sites Masterlist, November 2024 on file with REACH Radio Tamazuj: <a href="#">Fangak, over 3000 households returnees lack food and shelter</a> , July 2023 IOM: <a href="#">Event tracking</a> , December 2024 <sup>1</sup> MSF: <a href="#">Urgent action needed to address growing cholera outbreak in South Sudan</a> , November 2024 WHO South Sudan: <a href="#">Cholera outbreak situation report</a> , September to November 2024

	UNMISS <a href="#">peacekeepers support humanitarian efforts to protect civilians during cholera outbreak</a> : 20 Jan 2025 <sup>1</sup> South Sudan: <a href="#">Acute Food Insecurity Situation for September - November 2023 and Projections for December 2023 - March 2024 and for April - July 2024</a>		
<b>Population(s)</b>	<input type="checkbox"/> IDPs in camp	<input type="checkbox"/> IDPs in informal sites	
	<input checked="" type="checkbox"/> IDPs in host communities	<input type="checkbox"/> IDPs [Other, Specify]	
	<input type="checkbox"/> Refugees in camp	<input type="checkbox"/> Refugees in informal sites	
	<input type="checkbox"/> Refugees in host communities	<input type="checkbox"/> Refugees	
	<input checked="" type="checkbox"/> Host communities	<input checked="" type="checkbox"/> Returnees in host communities	
<b>Stratification</b>	<input checked="" type="checkbox"/> Geographical #: 3 (Hai 44, Mather, Muzafin) Population size per strata is known? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Population group: 2 groups (1: IDP in HC and HC, 2: Returnees) Population size per strata is known. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Other #: N/A Population size per strata is known. <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Data collection tool(s)</b>	<b>Sampling method</b>		<b>Data collection method</b>
<b>Tool 1: Household Survey Module</b>	<input checked="" type="checkbox"/> Probability / Simple random (Returnees) <input checked="" type="checkbox"/> Probability / Stratified simple random (IDP in HC and HC) <input type="checkbox"/> Probability / Random Location Sampling (RLC)		<input checked="" type="checkbox"/> Household interview: 220 HHS (1: IDP in HC and HC, 2: Returnees)
<b>Target level of precision if probability sampling: at population group level only</b>	95% level of confidence		+/- 10 % margin of error
<b>Tool 2: Community Leader Key Informant Interview (2 KIIs male and female with Returnees from Sudan, IDPs and host community)</b>	<input checked="" type="checkbox"/> Purposive <input type="checkbox"/> Random <input type="checkbox"/> Snowballing <input type="checkbox"/> [Other, Specify]		<input checked="" type="checkbox"/> Key informant interviews (Target #): 6 KIIs with community leaders
<b>Tool 3: Health Facility Key Informant Interview</b>	<input checked="" type="checkbox"/> Purposive <input type="checkbox"/> [Other, Specify]		<input checked="" type="checkbox"/> Key informant interviews (Target #): 1-2 KIIs with healthcare providers
<b>Tool 4: FSL Assistance Provider Key Informant Interview</b>	<input checked="" type="checkbox"/> Purposive <input type="checkbox"/> [Other, Specify]		<input checked="" type="checkbox"/> Key Informant Interviews (Target #): 2-3 KIIs with FSL service providers

<b>Tool 5: Community Observation</b>	x Purposive		x Direct observations (Target #): 3 (1 per neighbourhood)			
<b>Disaggregation by gender and age</b>	Gender		Age			
	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	Yes		
	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	No		
<b>Data management platform(s)</b>	<input checked="" type="checkbox"/>	IMPACT	<input type="checkbox"/>	UNHCR		
<b>Expected output type(s)</b>	<input type="checkbox"/>	Situation overview #: __	<input checked="" type="checkbox"/>	Report #: 1	<input checked="" type="checkbox"/>	Preliminary findings document (as needed)
	<input checked="" type="checkbox"/>	Presentation (Preliminary findings) #: 1	<input type="checkbox"/>	Presentation (Final) #: (as needed) __	<input type="checkbox"/>	Factsheet #: __
	<input type="checkbox"/>	Interactive dashboard #: _	<input type="checkbox"/>	Webmap #: __	<input type="checkbox"/>	Map #: __
<b>Access</b>	<input checked="" type="checkbox"/>	Public (available on REACH resource centre and other humanitarian platforms)				
	<input type="checkbox"/>	Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms)				
<b>Visibility</b>	<b>REACH</b>					
	<b>Donor: FCDO</b>					
	<b>Coordination Framework: NA</b>					
	<b>Partners: NA</b>					

## 2. Rationale

### 2.1 Background

Fangak County is situated in the north-western corner of Jonglei State and borders Ayod to the south, Canal/Pigi to the east, Panyikang (Upper Nile State) to the north-east, Pariang (Ruweng Administrative Area) to the north-west, and Guit and Koch (Unity State) to the west. The White Nile runs along the county's western and northern borders, which makes the county part of the eastern plains, sorghum and cattle livelihood zone (FEWSNET 2018).

Since 2021, most parts of Fangak County have remained inundated by floodwater.<sup>1</sup> In September 2024, new flooding displaced an estimated 15,000 people. Of these, around 3,600 moved to Tonga town in Panyikang County, Upper Nile State, while others moved to high-ground areas within Fangak.<sup>2,3</sup>

An interagency assessment conducted in September 2024 indicated that around 230,000 people were affected across several Payams by the flooding, including returnees from Sudan who already integrated within the host community, most of the IDPs were reportedly settled in Old Fangak town. Crops were submerged, livestock died, and widely restricted physical access to livelihood areas and health facilities. Health facilities have been damaged, and there have been outbreaks of malaria and diarrhea. Floodwater has contaminated most of the water sources, and there is a lack of water treatment products like PUR and Aqua tabs for treating the water fetched from the stream/river<sup>4</sup>.

<sup>1</sup> REACH: [Fangak shocks verification missions](#), Jonglei state, South Sudan, June 2021

<sup>2</sup> UNMISS: [Thousands of families flee rising waters in Fangak as extraordinary flooding hits South Sudan](#), September 2024.

<sup>3</sup> Radio Tamazuj: [Thousands flee Fangak villages over floods](#), August 2024

<sup>4</sup> IRNA Report: Fangak County, Jonglei State: September 2024 On file with REACH.

The population of Old Fangak faces several severe underlying vulnerabilities. The Payam currently hosts over 30,000 IDPs, the majority of whom are settled in Old Fangak town, as most of the Payam remains under floodwater.<sup>5</sup> In addition, a significant number of returnees from Sudan have arrived since the onset of the conflict there in April 2023. Many reportedly used informal routes that were not monitored by humanitarians or South Sudanese authorities. By mid-2023, over 3,000 households, comprising more than 10,000 individuals had returned to Fangak, primarily to Old Fangak<sup>6</sup>. These returnees continued to arrive throughout 2024.<sup>7</sup> The arrival of returnees strained already limited household food stocks and placed immense pressure on the scarce resources of humanitarian service providers. The combination of these shocks led to an outbreak of cholera in late 2024.<sup>8</sup> According to the WHO, Fangak was the worst-hit county in Jonglei state with 755 cases and 18 deaths. Most of these cases were reported in Old Fangak according to the humanitarian partners operating in the health sector,<sup>9</sup> placing additional strain on already overstretched local health services.<sup>10</sup>

According to the latest IPC analysis conducted in September 2024, food security and nutrition remains extremely poor. During the first projection period, from December 2024 to March 2025, Fangak was classified as IPC Phase 4 (Emergency), with acute malnutrition (AMN) also classified as Phase 4 (Critical).<sup>11</sup> A separate Returnee Household Analysis Group (HAG) was conducted for returnees from Sudan. These returnees were classified in IPC AFI Phase 4, with at least 5% of the population experiencing catastrophe during this period. Ideally, food security was projected to improve in most parts of the country; however, returnee households were expected to face deterioration due to early harvest exhaustion for those who cultivated and an increase in staple food prices in local markets, as most households would rely on market purchases.<sup>12</sup> Humanitarian conditions are likely to deteriorate further over the first half of 2025 as the relationship between Sudanese and South Sudanese deteriorates due to recent targeted killings, hindering the flow of trade.

**Table 1: IPC results for September 2024**

County	AFI Phase (Sep-Nov 2024)	AFI Phase (Dec 2024 - Mar 2025)	AMN Phase (Sep-Nov 2024)	AMN Phase (Dec 2024 - Mar 2025)
Fangak	4	4	4	4

**Table 2: Returnee Household Analysis Group (HAG)**

Returnee Household Analysis Group (HAG) – Population Distribution Estimates											
(September – November 2024)				Projected 1 (December 2024 – March 2025)				Projected 2 (April – Jul 2025)			
<b>314,000 people</b>	<b>Phase 5</b>	31,000	5%	<b>471,000 people</b>	<b>Phase 5</b>	31,000	5%	<b>535,000 people</b>	<b>Phase 5</b>	31,000	5%
(50% of the population group) facing acute food insecurity	<b>Phase 4</b>	126,000	20%	(75% of the population group) facing acute food insecurity	<b>Phase 4</b>	220,000	35%	(85% of the population group) facing acute food insecurity	<b>Phase 4</b>	252,000	40%

<sup>5</sup> South Sudan CCCM Cluster: IDP sites Masterlist, November 2024 on file with REACH

<sup>6</sup> Radio Tamazuj: [Fangak, over 3000 households returnees lack food and shelter](#), July 2023

<sup>7</sup> IOM: [Event tracking](#), December 2024

<sup>8</sup> MSF: [Urgent action needed to address growing cholera outbreak in South Sudan](#), November 2024

<sup>9</sup> WHO South Sudan: [Cholera outbreak situation report](#), September to November 2024

<sup>10</sup> UNMISS [peacekeepers support humanitarian efforts to protect civilians during cholera outbreak](#): 20 Jan 2025

<sup>11</sup> South Sudan: [Acute Food Insecurity Situation for September - November 2023 and Projections for December 2023 - March 2024 and for April - July 2024](#)

<sup>12</sup> Ibid

## 2.2 Intended impact

This assessment aims to determine the humanitarian needs across various public health sectors for the IDPs in the host communities/host communities (HC) and returnees from Sudan who are currently living in Old Fangak town, Fangak County (Jonglei State). It will also assess access to humanitarian services and identify any service gaps. The findings will support evidence-based advocacy for these different population groups, which we consider to have varying vulnerabilities, and will inform national decision-making processes. These processes include the monthly Needs Analysis Working Group (NAWG) meetings, which, in turn, inform the national Inter-Cluster Coordination Group (ICCG). Additionally, ad-hoc bilateral advocacy may be conducted with relevant clusters, working groups, and donors.

## 3. Methodology

### 3.1 Methodology overview

*The general research design for REACH's Integrated Public Health Rapid Assessment (IPHRA) consists of a mixed-methods approach comprising three main methods: **household surveys; key informant interviews (KIIs); and observation checklists**, each of these methods having core and supplemental specialized tools, each of which has core and supplemental indicators.*

This assessment will employ **a multi-sectoral household survey targeting IDPs within the Host Communities (HC) and HC members on one hand and returnees from Sudan on the other hand who are residing in Old Fangak town, along with key informant interviews with humanitarian service providers and community leaders, and a community observation checklist.**

The assessment will focus on two population groups (strata). The first group consists of IDPs living within HC and HC themselves. These groups will be treated as one, based on the general assumption that they share similar characteristics, as they have been displaced since the onset of flooding in 2020 and have since lived together in Old Fangak town. The second group comprises returnees from Sudan who arrived following the onset of the Sudan conflict in 2023 and are currently residing in Old Fangak town.

For the first population group (**IDPs within the HC and HC**), a **stratified simple random sampling design** will be used. This group will be divided into three geographic strata (1. Residents of Hai 44, 2. Residents of Hai Muzafin, 3. Residents of Hai Mathar). **The purpose is to get access to HH data from geographically distinct areas (sites) within the chosen location (Old Fangak town), however without aiming to obtain results that are representative at the site level.** These strata were delineated based on input from locally operating humanitarian service providers, under the assumption that they represent relatively homogeneous population groups with similar access to services such as healthcare and humanitarian food assistance, as well as similar living conditions, including population density and sanitation and hygiene standards. A total of **110 household surveys** will be conducted across these three strata.

For the second population group (**returnees from Sudan**), a **simple random sampling design** will be employed. This group will be treated as a single stratum, based on input from humanitarian service providers and local authorities, due to their distinct vulnerabilities—such as lack of cultivated land and livelihood assets. A total of **110 household surveys** will be conducted among this population. Key informant interviews with humanitarian service providers and community leaders, and a community observation checklist at selected sites.

### 3.2 Population of interest

The population of interest for this IPHRA consists of IDPs within the HC, HC, and returnees from Sudan who are currently residing in Old Fangak town. For this assessment, Old Fangak Payam has been selected, with a specific focus on Old Fangak town, which comprises three main sites (Hai 44, Muzafin, Mathar). Old Fangak was chosen due to the high presence

of IDPs and returnees from Sudan, as well as the recent cholera outbreak, which has further compounded the situation. This assessment will therefore provide detailed information on the humanitarian needs of a large and highly vulnerable population in an area facing chronic vulnerabilities and high risks.

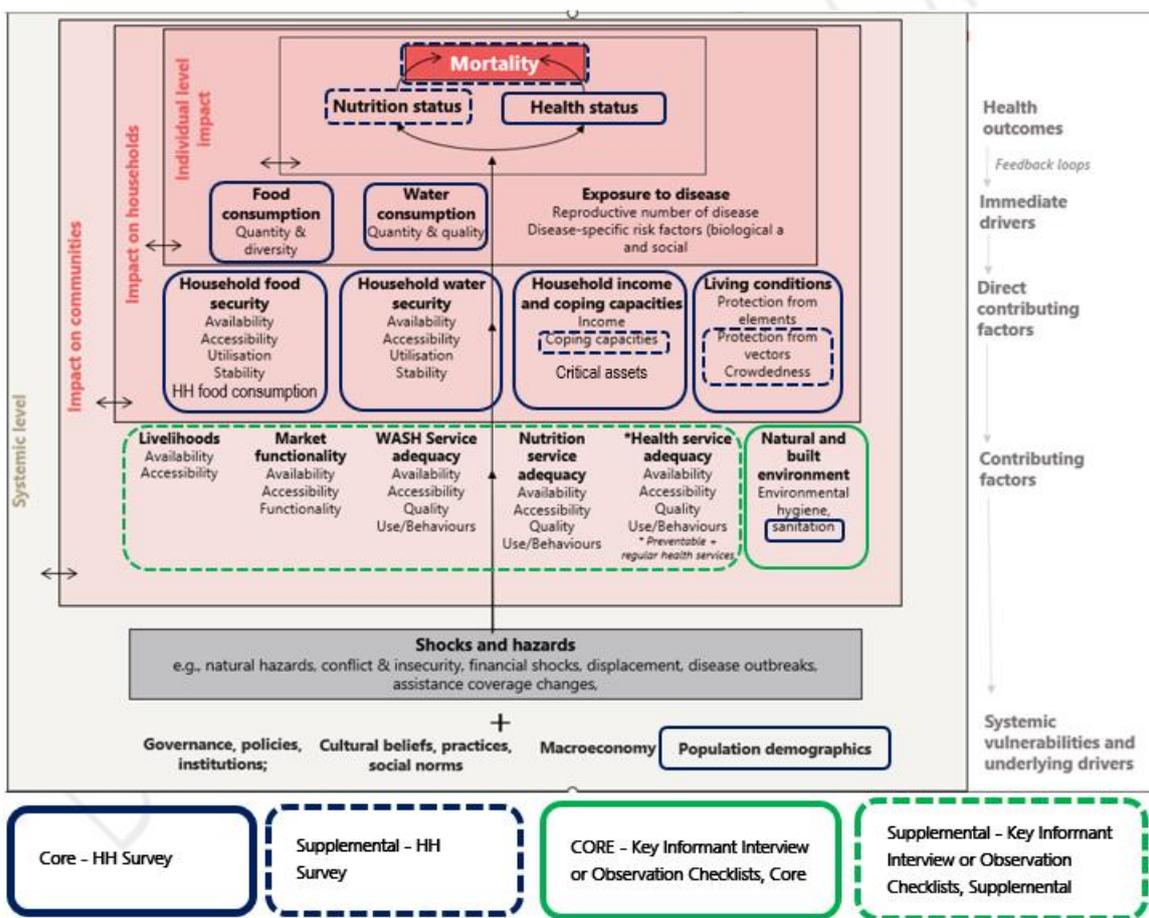
For this assessment, the following definitions will be used for the different population groups:

- **Internally displaced persons:** Households (HH) that have been forced or obliged to flee or leave their homes or places of habitual residence, particularly due to armed conflict, generalized violence, human rights violations, or natural or human-made disasters since the onset of flooding in 2020. These households have since been living together in Old Fangak town and have not crossed an internationally recognized state border.
- **Returnees:** HH who temporary been forced to flee their South Sudan because of persecution, war or violence (refugee) and who has since returned to their homes or places of habitual residence since the onset of Sudan war in 2023.
- **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

### 3.3 Secondary data review

The main assessment design is based off guidance documents and tools for REACH's Integrated Public Health Rapid Assessment (IPHRA). Secondly, the IPHRA toolkit is designed to align with the IMPACT Risk of Excess Mortality Framework utilized by IMPACT's Global Emergencies Team, in order to inform priority indicators and information to include within acute settings. See below for how the RoEM framework maps against different tools within the IPHRA toolkit.

The sample frame for this assessment was determined using the November 2024 CCCM Cluster IDP site master list, and figures provided by the local authorities on the host community and returnees from Sudan. Various additional sources were used to gain a better understanding of the operational context and underlying vulnerability profile of the target population.



List and summarize any secondary data sources that describe the population at risk and planning for the assessment:

Secondary source	Purpose of source
CCCM Site Master List, November 2024	<ul style="list-style-type: none"> <li>Delineation of sampling frame and strata; demographic breakdown of population.</li> </ul>
REACH: <a href="#">Fangak shocks verification missions</a> , Jonglei state, South Sudan, June 2021 UNMISS: <a href="#">Thousands of families flee rising waters in Fangak as extraordinary flooding hits South Sudan</a> , September 2024. Radio Tamazuj: <a href="#">Thousands flee Fangak villages over floods</a> , August 2024 IRNA Report: Fangak County, Jonglei State: September 2024 On file with REACH. Radio Tamazuj: <a href="#">Fangak, over 3000 households returnees lack food and shelter</a> , July 2023 IOM: <a href="#">Event tracking</a> , December 2024 MSF: <a href="#">Urgent action needed to address growing cholera outbreak in South Sudan</a> , November 2024 WHO South Sudan: <a href="#">Cholera outbreak situation report</a> , September to November 2024 UNMISS <a href="#">peacekeepers support humanitarian efforts to protect civilians during cholera outbreak</a> : 20 Jan 2025 South Sudan: <a href="#">Acute Food Insecurity Situation for September - November 2023 and Projections for December 2023 - March 2024 and for April - July 2024</a>	<ul style="list-style-type: none"> <li>Building contextual understanding of humanitarian needs and shock profile.</li> </ul>

REACH. Integrated Public Health Rapid Assessment Guidelines. 2024. (On file with REACH).	<ul style="list-style-type: none"> <li>Guidance on methods, including sampling and tools.</li> </ul>
<a href="#">Integrated Phase Classification dashboard.</a>	<ul style="list-style-type: none"> <li>Context on state of public health, specifically acute food insecurity and acute malnutrition.</li> </ul>

### 3.4 Primary Data Collection

The following section will provide details on the sampling and data collection methods for the household survey, key informant, and observation tools within the assessment.

#### Household surveys

##### Sample Size

As this assessment falls within a basic IPHRA (only FSL, WASH, Health) and no MUAC or mortality data is being collected, the sample size can be estimated at roughly 110 households per population group, using the 95% confidence level, 50% estimated proportion for household indicators, 10% margin of error, and a 10% non-response rate for the overall population group. Design effect is not considered as IPHRA does not consider cluster survey designs. Therefore, for this assessment 220 household surveys will be conducted (110 per population group).

##### Site Selection Methods

Of the sites identified through a secondary literature review and consultations with humanitarian partners on the ground, as well as local authorities, three (3) sites have been purposively selected. Fangak County hosts many IDPs and returnees across different Payams; however, for this IPHRA, we have purposefully selected Old Fangak town, which, according to CCCM data, hosts approximately 37,946 IDPs who have been living in Old Fangak for the past five years since the onset of the flooding. Additionally, a substantial number of returnees have been reported to be highly vulnerable.

The main considerations for selecting these sites include the high number of cholera cases, accessibility, logistical feasibility, and the fact that, according to partners, Old Fangak hosts fewer NGOs compared to New Fangak, which likely means a lower availability of services.

Since the population estimate per site is available, the target number of households for IDP in HC and HC is distributed proportionally across sites according to their population size (although not aiming to get representative results at the site level). The sampling breakdown per site can be found below.

Table 3: Population and sample size per stratum. Source: CCCM IDPs Master list as of November 2024 and Old Fangak RRC, February 2025. The average household size used to calculate the number of individuals is 7

	Site	Estimated Population IDP in HC + HC (individuals)	Estimated population (households)	Sample households	Number of random GPS points (clusters) needed
Old Fangak	Hai 44	36,890	5,270	54	18
	Hai Muzafin	25,823	3,689	39	13
	Hai Mathar	11,067	1,581	17	6
Total		<b>73,782</b>	<b>10,540</b>	<b>110</b>	<b>37</b>

For the returnee population, since the RRC has a list of arrivals in Old Fangak town since the onset of the conflict, Old Fangak town will be treated as a single geographic stratum. See Table 4 for the sampling.

Table 3: Returnees from Sudan population and sample size per stratum. Source: Old Fangak RRC, February 2025.

	Estimated population returnees (individuals)	Estimated population (households)	Sample households	Number of random GPS points (clusters) needed
Old Fangak	4102	587	110	37

### Household selection methods

#### IDPs in the HC and HC

Within the selected sites, households will be sampled using accepted methods in emergencies to possibly give each household within the site an equal probability of selection.

Using the REACH GeoRand tool, the boundary of each site will be delineated, and random GPS points will be generated within the site's boundary. The number of random points created will be the number of required households divided by three; so, to survey 110 target households, at least 37 random GPS points are needed over the assessment area. The survey team will visit each GPS point and interview the three closest households to that point, completing the survey tool and taking GPS points for each household.

For special sampling cases that may occur during data collection:

- **If the selected household refuses to participate**, they will still be counted as an interview and saved as non-consent and submitted. This counts towards the final sample size as it was considered in the non-response rate or buffer.
- **If the selected household is absent at the time of selection**, the field supervisor will determine whether the household is abandoned (no one lives there anymore) or just absent (the household is just not at home). If time allows, the supervisor may decide to return later in the day and see if the household has returned. If time is not available, the enumerator can be instructed to select immediately to the right of the sampled household instead.
- **If the selected structure has multiple families**, the operationalized definition of a "household" will be used to determine whether there are one or multiple households. If multiple households, then a single household will be randomly selected.

#### Returnees from Sudan households

A list of these households is available and has been shared by the RRC. From the 587 households, a list will be created in Excel using the RANDBETWEEN (1, [max number]) function, which generates a random integer between 1 and the total number of households in the dataset, ensuring an unbiased selection process for sampling. To implement this method, all households should first be listed with a unique identifier. A new column is then created where the RANDBETWEEN (1, [max number]) function is applied to assign a random number to each household. The dataset is then sorted based on these random numbers, and 110 households are selected from the top of the sorted list. This approach ensures that every household has an equal chance of being chosen.

Once the sample households are selected, enumerators, along with community leaders, will walk to each household to conduct interviews.

#### Team Composition and Data Collection

Each household survey team will consist of at least one field supervisor and three enumerators. For this assessment, two teams are required. Teams will receive a two-day training prior to data collection covering the purpose of the survey, good interview practices and ethical conduct during public health assessment, review of the survey tool, and as needed sessions on specific technical topics such as water consumption estimation. Data collection will be preceded by one day pilot and a

half day debrief. Additional days of piloting will be carried out as needed to ensure a proper understanding of tools and methods. Data collection will be carried out over the course of 8 days.

### Key Informant Interviews

There are several core and supplemental key informant tools within the IPHRA toolkit, however, for the purposes of this assessment the following key informant interviews are planned:

Core or Supplemental	Key Informant Interview Tool	Information Assessed	Number of KIIs Planned
Core	Community Leader KII	Perceived priority needs, perception of vulnerable groups, main barriers and challenges to accessing basic needs and services	3-6 community leaders <i>(IDP, host community and returnees from Sudan)</i>
Supplemental	Health service provider KII	Health Service Adequacy	2 – 3 key informant interviews
	FSL Assistance Provider KII	Emergency FSL Programming Adequacy	1 – 2 key informant interviews

### Key Informant Selection Methods

Community leaders and specialized key informants will be selected purposively based on their leadership positions in the community or as service providers. Community members can act as informants and may be included to balance out perspectives that may be missed if only community leaders are interviewed. Community members and/or leaders will be mobilized with the assistance of a hired guide, and with input from humanitarian actors that are operational in assessed sites.

### Observation Tools

There are several core and supplemental observation checklist tools within the IPHRA toolkit, however, for the purposes of this assessment the following tools will be applied:

Core or Supplemental	Key Informant Interview Tool	Information Assessed	Number of Observation Checklists Planned
Core	Community Observation Checklist	Natural and Built Environment; Living Conditions;	1 per assessment location

One observation checklist, lists checklists will be completed on a rolling basis as the data collection teams move throughout the site

## 3.5 Data Processing & Analysis

### Household Survey

Data will be collected using a contextualized IPHRA ODK tool. Cleaning and analysis will be done using a prepared [IPHRA toolkit](#) package of cleaning and analysis materials coded with R and available through IMPACT's HQ PHU. Survey weights will be used for each random location cluster equivalent to the inverse of the population density of each cluster. This

is intended to correct for any bias due to an uneven population density across the assessment area to make sure households have a more equal representation in the dataset.

### Key Informant Interviews

Community key informant interviews and community observation checklists will be analysed using a data analysis and saturation grid, with the objectives of (a) triangulating the self-perceived needs of the population against quantitative data, and (b) attaining a better qualitative understanding of the nature of needs and barriers. Responses will be compared across strata, as well as against household survey results to triangulate perceived vs. measured needs.

More specialized key informant service providers including health facility staff, and FSL NGO providers will be analysed separately to (a) indicatively assess the adequacy of markets, health facilities, and other infrastructure against the severity table in the IPHRA guidance, and (b) within the data and analysis saturation grid, triangulate against reported service issues from community interviews and household survey results.

A pre-prepared data and analysis saturation grid aligned with RDD templates and IPHRA tools will be available to help facilitate the analysis process, with sections to triangulate results against other tools.

### Observation Checklists

Community observation checklists will be analysed using a data and analysis saturation grid to triangulate against results from other tools on environmental public health threats and other noteworthy observations.

### Integrated Analysis

In order to have a holistic understanding of the severity of public health needs and service gaps, it is suggested to include an integrated analysis table. This table will assign severity to one of the RoEM domains based on the evidence captured within the IPHRA assessment. The analyst can use the recommended thresholds in the standards tables located in the IPHRA Guidance document to help assign severity, however, these are just recommendations based on standards and if needed these thresholds may be contextualized at the country level. A simple tabulation can be done to give a risk score for (a) health outcomes, (b) contributing factors, and (c) overall combined. A high severity contributed a score of '2', a medium severity contributes '1', and low severity contributes '1'.

**Table 5: Example Integrated Analysis Table**

Category	Domain	Severity		
		Group 1	Group 2	Group 3
Health Outcomes	Mortality* <sup>13</sup>	Medium	Low	Low
	Malnutrition*	High	Medium	Low
	Morbidity	Medium	High	Low
Immediate Drivers	Food Consumption	Medium	Medium	Medium
	Water Consumption	Low	Low	High
Direct Contributing Factors	Household Food Security	High	Low	Medium
	Household Water Security	Low	Low	Medium
	HH Income and Coping	High	Low	Medium
	Living Conditions	Medium	High	Medium

<sup>13</sup> For this assessment, the following indicators (mortality, malnutrition, market functionality, and nutrition service adequacy) are not captured.

Indirect Contributing Factors	Natural and built environment (Sanitation)	Medium	Low	Medium
	Market Functionality*	High	High	High
	WASH Service Adequacy	Medium	High	High
	Health Service Adequacy	Low	Not assessed	Not assessed
	Nutrition Service Adequacy*	High	Medium	Low
Integrated Analysis Health Outcomes Score (High =2; Medium = 1; Low = 0)		4 / 6	3 / 6	0 / 6
Integrated Analysis Contributing Factors (High =2; Medium = 1; Low = 0)		12 / 22	8 / 22	12 / 22
Integrated Analysis Score Total (High =2; Medium = 1; Low = 0)		16 / 28	11 / 28	12 / 28

### 3.6 Limitations

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

- **Not a causal analysis** – The intent of the IPHRA method is 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 shouldn't be generalized to a wider population beyond the sites and facilities assessed. Although this assessment does not aim to obtain representative results at the site level, it focuses on the population group instead.
- **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.

## 4. Key ethical considerations and related risks

The proposed research design meets/does not meet the following criteria:

<i>The proposed research design...</i>	<i>Yes/ No</i>	<i>Details if no (including mitigation)</i>
... Has been coordinated with relevant stakeholders to <b>avoid unnecessary duplication</b> of data collection efforts?	Yes	
... <b>Respects respondents, their rights and dignity</b> ( <i>specifically by: seeking informed consent, designing length of survey/</i>	Yes	

<i>discussion while being considerate of participants' time, ensuring accurate reporting of information provided)?</i>		
... Does not <b>expose data collectors to any risks as a direct result</b> of participation in data collection?	Yes	
... Does not <b>expose respondents / their communities to any risks as a direct result</b> of participation in data collection?	Yes	
... Does not involve <b>collecting information on specific topics which may be stressful and/ or re-traumatizing</b> for research participants (both respondents and data collectors)?	Yes	
... Does not involve <b>data collection with minors</b> i.e. anyone less than 18 years old?	Yes	
... Does not involve <b>data collection with other vulnerable groups</b> e.g. persons with disabilities, victims/ survivors of protection incidents, etc.?	No	Given the context of South Sudan, it is likely that the assessed population will include sick or malnourished persons, and/or survivors of serious protection concerns. Team leaders have been trained on PSS First Aid, and informed consent will be obtained from respondents before proceeding with the survey.
... Follows IMPACT SOPs for management of <b>personally identifiable information</b> ?	Yes	
... if an anthropometric component is included (MUAC data) will a standardization test be conducted or trained measurers from local nutrition partners be involved?	N/A	
... if a mortality component is included (crude mortality rates) will the assessment team receive any basic Psychosocial First Aid (PFA) training beforehand?	N/A	
... will assessment teams be aware of basic complaints and referral mechanisms in case needed during the course of the assessment?	Yes	

## 5. Roles and responsibilities

<b>Task Description</b>	<b>Responsible</b>	<b>Accountable</b>	<b>Consulted</b>	<b>Informed</b>
Research design	FSL Senior Assessment Officer (FSL SAO)	FSL SAO	HQ Public Health Unit (PHU), HQ Research Department (RD), Assessment Specialist	South Sudan Country Coordinator (CC)
Supervising data collection	FSL SAO, Field Officer (FO)	FSL SAO	Public Health Unit Research Manager (PHU-RM)	CC

Data processing (checking, cleaning)	FSL SAO	FSL SAO	PHU	CC
Data analysis	Data Officer (DO), FSL SAO	FSL SAO	PHU, DCC	CC
Output production	FSL SAO,	FSL SAO	DCC, PHU RM,	CC
Dissemination	FSL SAO	FSL SAO	PHU RM, CC	CC
Monitoring & Evaluation	FSL SAO	FSL SAO	PHU	CC
Lessons learned	FSL SAO	FSL SAO	PHU HQ	PHU RM, CC

**Responsible:** the person(s) who executes the task

**Accountable:** the person who validates the completion of the task and is accountable of the final output or milestone

**Consulted:** the person(s) who must be consulted when the task is implemented

**Informed:** the person(s) who need to be informed when the task is completed

**Drafting tips:** Only one person can be Accountable; the only scenario when the same person is listed twice for a task is when the same person is both Responsible and Accountable.

## 6. Data Analysis Plan

### TOOL 1: CORE OBJECTIVE 1 – DEMOGRAPHIC COMPOSITION

Research questions	IN #	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
What is the sex and age distribution of the assessed population?	A.0.1	HH Interview	Demographics	How many people are in your household?	Enter number	HH
	A.0.2	HH Interview	Demographics	What is the sex of the individual?	Male Female	Individual
	A.0.3	HH Interview	Demographics	What is the age of the individual?	Enter number	Individual
	A.0.4	HH Interview	Demographics	Do you know the day, month, and year **date of birth** of the individual?	Yes No Don't know	Individual
	A.0.5	HH Interview	Demographics	What is the **date of birth** for the individual?	Date (DD/MM/YYYY)	Individual
	A.0.6	HH Interview	Demographics	If not exact date, can you estimate the **month-year of birth** for the individual?	Date (MM/YYYY)	Individual

**TOOL 1: FOOD SECURITY AND LIVELIHOODS**

Research questions	IN #	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
<i>What is the proportion of households in the assessed population experiencing food consumption gaps in terms of quantity and diversity?</i>	A.1.0	HH Interview	FCS	How many days over the last 7 days, did members of your household ate Cereals, grains, roots and tubers (Starch)?	Number 0-7	HH
	A.1.1	HH Interview	FCS	... Pulses, Legumes, nuts?	Number 0-7	HH
	A.1.2	HH Interview	FCS	... Milk and other dairy products?	Number 0-7	HH
	A.1.3	HH Interview	FCS	... Meat, fish and egg?	Number 0-7	HH
	A.1.4	HH Interview	FCS	... Vegetables and leaves?	Number 0-7	HH
	A.1.5	HH Interview	FCS	... Fruits?	Number 0-7	HH
	A.1.6	HH Interview	FCS	... Oil, fat, butter?	Number 0-7	HH
	A.1.7	HH Interview	FCS	... Sugar, or sweet?	Number 0-7	HH
	A.1.8	HH Interview	FCS	... condiments and spices?	Number 0-7	HH
	A.1.9	HH Interview	HHS	In the past 4 weeks (30 days), was there ever no food to eat of any kind in your house because of lack of resources to get food?	Yes; No	HH
	A.1.10	HH Interview	HHS	How often did this happen in the past [4 weeks/30 days]?	Rarely (1-2 times); Sometimes (3-7 times); Often (more than 10 times)	HH
	A.1.11	HH Interview	HHS	In the past 4 weeks (30 days), did you or any household member go to sleep at night hungry because there was not enough food?	Yes; No	HH
	A.1.12	HH Interview	HHS	How often did this happen in the past [4 weeks/30 days]?	Rarely (1-2 times); Sometimes (3-7 times); Often (more than 10 times)	HH
A.1.13	HH Interview	HHS	In the past 4 weeks (30 days), did you or any household member go a whole day and night without eating anything at all because there was not enough food?	Yes; No	HH	

	A.1.14	HH Interview	HHS	How often did this happen in the past [4 weeks/30 days]?	Rarely (1-2 times); Sometimes (3-7 times); Often (more than 10 times)	HH
<i>What are the main sources of food utilized by the assessed population in the last 7 days?</i>	A.1.15	HH Interview	Main Sources of Food	What are the household's most important sources of food in the past 7 days?	Own crop/garden production; Market (Purchase cash or credit); Borrowing/debts; Support from neighbors/relatives; Exchange of food for labor; Bartering; Hunting; Fishing; Gathering; Humanitarian food assistance; Other; None;	HH
	A.1.16	HH Interview	Main Sources of Food	First source:		HH
	A.1.17	HH Interview	Main Sources of Food	Second source:		HH
<i>What are the main sources of water and fuel utilized by households for cooking in the assessed population?</i>	A.1.18	HH Interview	Food Utilization – Water	What water source does your household use for food preparations in the past 30 days?	Piped into dwelling Piped into compound, yard or plot Piped to neighbour Public tap/standpipe Borehole or tubewell Protected well Unprotected well Protected spring Unprotected spring Rainwater collection Tanker-truck Cart with small tank / drum Water kiosk Bottled water Sachet water Surface water (river, dam, lake, pond, stream, canal, irrigation channel) Other (specify) Don't know Prefer not to answer	HH
	A.1.19	HH Interview	Food Utilization – Fuel	What energy source does your household use for food preparations in the past 30 days?	Firewood Cow, camel (animal) dung	HH

					Coal (charcoal, mineral charcoal) Electricity Biogas Gas Straw or other feed Other (specify) Don't know Prefer not to answer	
<p><i>What are the main barriers to accessing food for the assessed population?</i></p> <p><i>What are the self-reported perceptions of food needs in the assessed population?</i></p>	A.1.20	HH Interview	Barriers to Food Accessibility	In the last 7 days, did you face any barriers to consistently accessing food sources?	<p>No barrier faced accessing food sources</p> <p>Live too far from food sources/no means of transport.</p> <p>Transportation to food source too expensive.</p> <p>Not enough food is available</p> <p>Damage to main source of food</p> <p>Security issues travelling to and from food sources.</p> <p>Not allowed to access main food sources (cultural, social, etc. reasons)</p> <p>Other (specify)</p> <p>Don't know</p> <p>Prefer not to answer</p>	HH
<p><i>What is the household coverage of emergency food security interventions in the assessed population?</i></p>	A.1.21	HH Interview	Coverage of Emergency FSL Intervention	Is you or any member of your household registered and received for general food distribution/cash/voucher programming?	Yes, No, Don't know	HH
	A.1.22	HH Interview	Coverage of Emergency FSL Intervention	If yes, please select what you received in the last 2 weeks?	<p>Food In-Kind</p> <p>Food vouchers</p> <p>Livelihoods (inputs) voucher</p> <p>Multi Purpose</p> <p>Cash Assistance</p> <p>Cash for food</p> <p>Cash for livelihoods (inputs, assets, etc)</p> <p>Other (specify)</p> <p>None</p> <p>Prefer not to answer</p>	HH

<i>What are the main sources of income of the assessed population in the last 30 days?</i>	A.1.23	HH Interview	Main income sources	What are your household's first main source of income in the past 30 days?	Salary and wages (professional, religious/spiritual, or service industry, etc.) Selling of own-produced agricultural products (grains, honey, sesame/seeds, vegetables/fruit) Selling of own-produced animal products (dairy, egg, meat, skin&hide) Selling of collected firewood, charcoal, wild foods Shopkeeper or trader Daily labor - agricultural (farm, vegetable gardens, etc.) Daily labor - skilled (carpentry, masonry, hair-dressing, mining, driver, etc.) Daily labor - casual (petty trade, taxi redat, etc.) Savings Pension Remittances or support from family member Gifts or donations from community Loans from community Humanitarian cash assistance Begging Other (specify) None Prefer not to answer	HH
	A.1.24	HH Interview	Main income sources	What are your household's second main source of income in the past 30 days?		HH
<i>What proportion of households in the assessed population are utilizing</i>	A.1.25	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household send any household members to eat with another household because of a lack of food or money to buy food?	YES NO, my household did not experience a lack of food that would make us try to do this	HH

<i>stress-, crisis-, and emergency-level livelihoods coping strategies to access food and other basic needs?</i>	<b>A.1.26</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household sell more animals than usual for this time of year because of a lack of food or money to buy food?	NO, because I have already engaged in this activity in the last 12 months and cannot continue doing it Not applicable - it is not possible for me to do this, even if I needed to	HH
	<b>A.1.27</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household borrow money or purchase food on credit because of a lack of food or money to buy food?		HH
	<b>A.1.28</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household sell household assets or goods (such as furniture, a radio, a mattress) because of a lack of food or money to buy food?		HH
	<b>A.1.29</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household sell any productive assets or means of transport (such as a fishing net, canoe, cultivation tools, bicycle, etc) because of a lack of food or money to buy food?		HH
	<b>A.1.30</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household harvest immature crops (such as green maize) because of a lack of food or money to buy food?		HH
	<b>A.1.31</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household sell or eat seeds intended for planting this season because of a lack of food or money to buy food?		HH
	<b>A.1.32</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household sell or slaughter the last of your cows and goats because of a lack of food or money to buy food?		HH
	<b>A.1.33</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your household travel to another village or cattle camp to look for food because of a lack of food or money to buy food?		HH
	<b>A.1.34</b>	HH Interview	Livelihoods Coping Strategies Index (LCSI)	In the last 30 days, did your any members of your household beg other community members for food because of a lack of food or money to buy food?		HH

**TOOL 1: CORE OBJECTIVE 7 – WATER, SANITATION, AND HYGIENE**

Research questions	IN #	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
<p><i>What proportion of households have access to safe, improved drinking water in the assessed population?</i></p> <p><i>What is the average and median liters per person per day consumed in the assessed population?</i></p>	A.2.0	HH Interview	Main sources of water	<p>What is the main source of water used by your household for drinking or other household uses?</p> <p>What are the other sources of water you use for drinking or other household uses?</p>	Piped into dwelling Piped into compound, yard or plot Piped to neighbour Public tap/standpipe Borehole or tubewell Protected well Unprotected well Protected spring Unprotected spring Rainwater collection Tanker-truck Cart with small tank / drum Water kiosk Bottled water Sachet water Surface water (river, dam, lake, pond, stream, canal, irrigation channel) Other (specify) Don't know	HH
	A.2.1	HH Interview	Liters per person per day	Do you have any containers that you use to Collect and Store drinking water for your house?	Yes, No, Don't Know	HH
	A.2.2	HH Interview	Liters per person per day	How many containers did you use to collect water yesterday, or the last time you filled all your storage containers?	Number	HH
	A.2.3	HH Interview	Liters per person per day	What is the type of container number $\{container\_position\}$ ?	20L bucket 14L bucket 20L rigid jerry can 10L jerry can 5L collapsible jerry can 5L oil jerry can 2L jug Other (specify)	HH
	A.2.4	HH Interview	Liters per person per day	If other, can you specify the size per litre of the container.	Number (liters)	HH
	A.2.5	HH Interview	Liters per person per day	Do you know how many times was this container filled YESTERDAY (or the last time water was collected)?	Number	HH
	A.2.6	HH Interview	Liters per person per day	From the last time you collected water, how many days do you estimate this	Number	HH

				water will last your household before needing to collect more water? (number of days)		
<i>What proportion of households can collect water within 30 minutes, including travel to, from, and queuing time?</i>	<b>A.2.7</b>	HH Interview	Water collection time	How long does it take the household to collect water (including travel to and from and waiting)?	Water available inside the compound Under 30 minutes 30 minutes to less than 1 hour 1 hour to less than half a day Half a day More than half a day Don't know	HH
<i>What of water treatment methods are households in the assessed population using?</i>	<b>A.2.8</b>	HH Interview	Water treatment	What do you do to treat the water you drink if anything?	No treatment Boil water Chlorine tablet / Aquatab Filter cloth Other (specify) Don't know	HH
<i>What are the self-reported perceptions of water needs and barriers to access in the assessed population?</i>	<b>A.2.9</b>	HH Interview	Water usage	What do you use water from $\{wash\_water\_source\}$ for? [for each source]	Drinking Cooking Bathing Laundry Household hygiene Other (specify)	HH
	<b>A.2.10</b>	HH Interview	Water Stability	If water source on the premises/rainwater catchment, has your household had any interruption in water availability in the past two weeks (15 days)?	Yes, No	HH
	<b>A.2.11</b>	HH Interview	Water Stability	If yes, how many days with any water interruption?	Number	HH
<i>What proportion of households in the assessed population have access to improved sanitation facilities?</i>	<b>A.2.12</b>	HH Interview	Latrine type	What kind of toilet facility do members of your household usually use?	Flush to piped sewer system Flush to septic tank Flush to pit latrine Flush to open drain Flush to elsewhere Flush to don't know where Pit latrine with slab Pit latrine without slab / open pit Composting toilet Plastic Bag Bucket Hanging toilet/hanging latrine No facility/bush/field Other Prefer not to answer Ventilated improved pit latrine (with	HH

					slab) [DEPENDING ON CONTEXT] Twin pit latrine with slab [DEPENDING ON CONTEXT] Container based sanitation [DEPENDING ON CONTEXT]	
	<b>A.2.1 3</b>	HH Interview	People per latrine	Do you share this facility with others who are not members of your household?	Yes, No	HH
	<b>A.2.1 4</b>	HH Interview	People per latrine	If yes, how many households in total use this toilet facility, including your own household?	Number	HH
	<b>A.2.1 5</b>	HH Interview	Soap access	Do you have soap in the home (ask to see soap, to see if it appears in a minute)?	No soap in the house Yes, AND they brought the soap within 1 minute Yes, but DON'T see soap within 1 minute Don't know Prefer not to answer	HH

#### TOOL 1: SHELTER AND CRITICAL NFIS

Research questions	IN #	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
<i>What types of shelter are the assessed population living in?</i>	<b>A.3.0</b>	HH Interview	Shelter type	What type of shelter do you live in?	Solid / finished house Solid / finished apartment Unfinished / non-enclosed building Tent Makeshift shelter None (sleeping in open) Other (specify) Don't know Prefer not to answer	HH
<i>What are the main non-food items needs of the assessed population?</i>	<b>A.3.1</b>	HH Interview	Shelter damage	What damage and/or noticeable issues does your enclosure have?	No damage or noticeable issue Minor damage to roof (cracks, openings) Major damage to roof with risk of collapse Damage to windows and/or doors (missing, broken, unable to shut properly) Damage to floors Damage to walls	HH

					<p>Lack of privacy inside the shelter (no partitions, doors)</p> <p>Lack of space inside shelter (min 3.5m<sup>2</sup> per household member)</p> <p>Shelter is too cold</p> <p>Shelter is too hot</p> <p>Limited ventilation (no air circulation unless main entrance is open)</p> <p>Leaks during rain</p> <p>Unable to lock the shelter</p> <p>Lack of lighting inside or outside the shelter</p>	
<b>A.3.2</b>	HH Interview	NFI needs	Are members of your household able to cook where you live?	<p>Yes, without any issues</p> <p>Yes, with issues</p> <p>No, can't do</p>	HH	
<b>A.3.3</b>	HH Interview	NFI needs	<p>Please explain why you can't cook / the issues you face for cooking?</p>	<p>Insufficient essential household items for cooking (utensils, kitchen sets, eating sets)</p> <p>Lack of access to cooking facilities</p> <p>Unsafe cooking facilities</p> <p>Inadequate space for cooking (leaks during rain)</p> <p>Insufficient space</p> <p>Insufficient cooking fuel</p> <p>Other (specify)</p> <p>Prefer not to answer</p>	HH	
<b>A.3.4</b>	HH Interview	NFI needs	Are members of your household able to sleep where you live?	<p>Yes, without any issues</p> <p>Yes, with issues</p> <p>No, can't do</p>	HH	
<b>A.3.5</b>	HH Interview	NFI needs	<p>Please explain why you can't sleep / the issues you face for sleeping?</p>	<p>Insufficient essential household items for sleeping (bedding, mattresses and mats, bednets)</p> <p>Insufficient space</p> <p>Unsafe space</p> <p>Inadequate space for sleeping (leaking during rain, noisy space, space not meant for sleeping)</p> <p>Other (specify)</p>	HH	

					Prefer not to answer	
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## TOOL 1: HEALTH

Research questions	IN #	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
<i>What proportion of the population is experiencing unmet healthcare needs in the two weeks prior to data collection</i>	A.4.1	HH interview	Unmet healthcare needs	Has the individual had any illness or health problem in the last two weeks and needed to access health care?	Yes No Don't know	HH
	A.4.2	HH interview	Unmet healthcare needs	What symptoms did the individual have?	Fever; Diarrhoea; Cough; Fast and difficulty breathing; Eye infection or red eyes; Skin infection; Ear infection; Rash with raised bumps on head or neck; Other; Don't know; Prefer not to answer;	Individual
	A.4.3	HH interview	Unmet healthcare needs	If the individual had diarrhea in the last two weeks, did they have 3 or more loose stools per day?	Yes No Don't know	Individual
<i>How do these unmet needs differ by sex, age, and symptom?</i>	A.4.4	HH interview	Unmet healthcare needs	If yes, was the individual able to obtain health care when he / she felt they needed it?	Yes No Don't know	Individual

	A.4.5	HH Interview	Unmet healthcare needs	If yes, where did go to obtain health care?	Govt. hospital; Govt. health center; Govt. health post; Other govt. facility; Private hospital; Private clinic; Other private facility; NGO hospital; NGO clinic; Other NGO facility; Traditional practitioner; Other; Prefer not to respond; Don't know	Individual
<i>What are the self-reported perceptions of health and nutrition needs and access to care in the assessed population?</i>	A.4.6	HH Interview	Healthcare barriers	In the last 2 weeks, what barriers if any has your household experienced to prevent you from accessing the health care you needed? [choose up to 3 most important]	Did not need to access services; No functional health facility nearby; Specific service sought unavailable Could not afford cost of medication Could not afford cost of consultation/service Long waiting time for the service Health facility is too far away Disability prevents access to health facility Not safe/insecurity at health facility Not safe/insecurity while travelling to health facility Not enough staff at health facility Fear or distrust of health workers, examination or treatment Could not take time off work / from caring for children Specify other reason Don't know Prefer not to answer No barriers experienced	HH

	A.4.7	HH Interview	Health care barriers	Are you or any member of your household able to access health care providers within one hour by normal means of transportation?	Yes No Don't know	HH
<i>What proportion of people 5 years and older have received any cholera vaccination?</i>	A.4.8	HH Interview	Cholera vaccination Measles vaccination	Has the individual a received oral cholera vaccination with the last 12 months?	Yes, from maternal recall Yes, from vaccination card /record No Don't know	Individual
<i>What proportion of children 9-59 months have received any measles vaccination?</i>	A.4.9	HH Interview	Measles vaccination	Has the child ever received measles vaccination?	Yes, from maternal recall Yes, from vaccination card /record No Don't know	Individual
<i>What proportion of children 6-59 months have received Vitamin A supplementation in the last 6 months?</i>	A.4.10	HH Interview	Vitamin A supplementation	Has the child received Vitamin A supplementation in last 6 months?	Yes No Don't know	Individual

## TOOL 2: COMMUNITY LEADER AND MEMBER INTERVIEW TOOL

Research questions	SUBQ#	Sub-question	Questionnaire QUESTION	Probes	Data collection method	Key disaggregations (Group types)
<b><i>What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?</i></b>	4.5	<i>What are the self-reported perceptions of water needs and barriers to access in the assessed population?</i>	(Water) Does the community have a serious problem because you do not have enough water that is safe for drinking or cooking?	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing the community from accessing enough safe drinking or cooking water?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
<b><i>What is the severity of food security and</i></b>	3.2	<i>What are the self-reported</i>	(Food) Do people have a serious problem with food? For	If yes, please describe the problem? Who has this problem?	Key informant interview	Community leader vs. member; Sex;

<b><i>livelihoods needs and service gaps in the population?</i></b>		<i>perceptions of food needs in the assessed population?</i>	example, because they do not have enough food, or good enough food, or because you are not able to cook food	If yes, what are the main barriers preventing the community from accessing enough food, or good enough?		Assessment Site;
<b><i>What are severity of the Shelter and NFIs needs and service gaps in the population?</i></b>	5.2	<i>What are the self-reported perceptions of shelter and NFI needs in the assessed population?</i>	(Place to Live In) Do people in the community have a serious problem because they do not have a suitable place to live in?	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing the community from having a suitable place to live?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
<b><i>What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?</i></b>	4.5	<i>What are the self-reported perceptions of water needs and barriers to access in the assessed population?</i>	(Toilets) Do people in the community have a serious problem because they do not have easy and safe access to a clean toilet?	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing the community from having a suitable place to live?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
<b><i>What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?</i></b>	4.5	<i>What are the self-reported perceptions of water needs and barriers to access in the assessed population?</i>	(Keeping Clean) For men: Do people have a serious problem because in your community it is difficult for people to keep clean? For example, because people do not have enough soap, water or a suitable place to wash. For women: Do people have a serious problem because in your community it is difficult to keep clean? For example, because people do not have enough soap, sanitary materials, water	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing people in the community from being able to keep clean?	Key informant interview	Community leader vs. member; Sex; Assessment Site;

			or a suitable place to wash			
<b>What are the severity of the Shelter and NFIs needs and service gaps in the population?</b>	5.2	<i>What are the self-reported perceptions of shelter and NFI needs in the assessed population?</i>	(Clothes, Shoes, Blankets) Do people in the community have a serious problem because they do not have enough, or good enough, clothes, shoes, bedding or blankets?	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing people in the community from having enough, or good enough clothes, shoes, bedding or blankets?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
<b>What is the severity of food security and livelihoods needs and service gaps in the population?</b>			(Income or Livelihoods) Do people have a serious problem because they do not have enough income, money or resources to live?	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing people in the community from having enough income, money or resources to live?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
<b>What is the severity of health and nutrition needs and service gaps in the population?</b>	2.3	<i>What are the self-reported perceptions of health and nutrition needs and access to care in the assessed population?</i>	(Physical Health) Do people have a serious problem with their physical health? For example, because you have a physical illness, injury or disability	If yes, please describe the problem? Who has this problem?  If yes, what are the causes of peoples' issues with their physical health?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
<b>What is the severity of health and nutrition needs and service gaps in the population?</b>	2.3	<i>What are the self-reported perceptions of health and nutrition needs and access to care in the assessed population?</i>	(Health care) For men: Do men have a serious problem because they are not able to get adequate health care for themselves? For example, treatment or medicines. For women: Do they have a serious problem because they are not able to get	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing people in the community getting adequate health care for themselves?	Key informant interview	Community leader vs. member; Sex; Assessment Site;

			adequate health care for themselves? For example, treatment or medicines, or health care during pregnancy or childbirth.			
<b>What are the community's self-perceived priority needs and humanitarian assistance?</b>	6.2	<i>Are there any perceived safety concerns for the assessed population?</i>	(Safety) Do people have a serious problem because they or their families are not safe or protected where they live now? For example, because of conflict, violence or crime in your community, city or village.	If yes, please describe the problem? Who has this problem?  If yes, what are the reasons people are not safe or protected?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
	6.3	<i>Are there any perceived issues with the way aid is delivered for the assessed population?</i>	(The way aid is delivered) Do you have a serious problem because of inadequate aid? For example, because you do not have fair access to the aid that is available, or because aid agencies are working on their own without involvement from people in your community	If yes, please describe the problem? Who has this problem?  If yes, what are the main barriers preventing people in the community from having enough income, money or resources to live?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
	6.1	<i>What are the self-reported priority needs for the population?</i>	Do you have any other serious problems that I have not yet asked you about? Write down the person's answers	Not applicable	Key informant interview	Community leader vs. member; Sex; Assessment Site;
	6.1	<i>What are the self-reported priority needs for the population?</i>	Out of all these problems we have asked you about, which one is the most serious problem?	Not applicable	Key informant interview	Community leader vs. member; Sex; Assessment Site;

6.1	<i>What are the self-reported priority needs for the population?</i>	Which one is the second most serious?	Not applicable	Key informant interview	Community leader vs. member; Sex; Assessment Site;
6.1	<i>What are the self-reported priority needs for the population?</i>	Which one is the third most serious?	Not applicable	Key informant interview	Community leader vs. member; Sex; Assessment Site;

### TOOL 3: HEALTH FACILITY STAFF INTERVIEW TOOL

Research questions	IN #	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
<i>(Supplemental) What if any gaps are there with human resources, infrastructure, supplies, equipment, and WASH environment of health facilities serving the assessed population?</i>		KI	Type facility	Type/level of health facility	0 Hospital 0 Referral Health Centre 0 Health Clinic/Post 0 Mobile 0 Other (specify)	Health Facility
		KI	Facility management	Management of this Facility	Public / Government; Private; NGO; Other	Health Facility
		KI	NGO Support	Is the facility currently supported by any organization (NGOs, UN, etc)?	Yes; No	Health Facility
		KI	Hours operation	On average, how many hours per day is this facility open for non-emergency outpatient services?	Integer [Usual hours of operation] Integer [# of days open]	Health Facility
		KI	Population covered	Population covered by health facility	Integer [Population before crisis] Integer [Population after crisis]	Health Facility
		KI	Distance to facility	Average Distance to health facility (in km) / time mins/hrs	Integer [kilometers] Integer [In time]	Health Facility
		KI	Financial access	Financial access to the facility	Free of Charge all patients; Free of charge certain patients: User fees all patients; User fees certain patients;	Health Facility
		KI	Health care staffing	# of total staff	Integer [Before crisis] Integer [After crisis]	Health Facility
		KI	Health care staffing	# of Medical Doctor	Integer [male] Integer [female]	Health Facility

		KI	Health care staffing	# of Clinical Officer	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Nurse	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Midwife	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Medical Assistant	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Vaccinator	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Dispenser	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Lab Technician	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Volunteers	Integer [male] Integer [female]	Health Facility
		KI	Health care staffing	# of Other (specify)	Integer [male] Integer [female]	Health Facility
<i>(Supplemental) What are the availability of services at health facilities serving the assessed population?</i>		KI	Service Consultations	How many total daily consultations do you receive?	Integer [Before crisis] Integer [Average last 7 days]	Health Facility
		KI	Service Consultations	Integrated management of childhood illness (IMCI)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Vaccination (EPI services)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Treatment for non-communicable diseases (NCDs)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Treatment for TB	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility

		KI	Service Consultations	Treatment for HIV	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Treatment for mental health disorders	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Deliveries	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Emergency Obstetric Care (BEmONC or CEmONC)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Clinical management of rape (CMR)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Safe abortion care	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Family planning	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	Treatment for STIs	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
		KI	Service Consultations	ANC	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility

	KI	Service Consultations	PNC	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
	KI	Service Consultations	Nutritional Screening (MUAC)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
	KI	Service Consultations	Outpatient therapeutic programme (OTP)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
	KI	Service Consultations	Infant and Young Child Feeding (IYCF)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
	KI	Service Consultations	In-patient management of acute malnutrition with medical complications (Stabilization Centre)	Available Before Crisis: Yes; No Available Now: Yes; No Average Weekly Visits: Integer	Health Facility
	KI	Service interruptions	If there are any primary health care services not being provided, or that have stopped recently, please explain what has caused this?	Text	Health Facility
	KI	Vulnerable Groups	Are you aware of any groups of people that have less access to these health services compared to the general population? If so, who?	Text	Health Facility
	KI	Inpatient Services	Does this facility have inpatient services	Yes; No	Health Facility
	KI	Wards and Beds	If yes, what inpatient wards and how many beds are available in this facility?	Ward: _____ Number of beds: _____	Health Facility
	KI	Diagnostic Services	Does this facility have diagnostic services?	Yes, No	Health Facility
	KI	Lab	Are laboratory services available?	Service Before: Yes, No Service Now: Yes, No Average Weekly Visits: Integer	Health Facility

		KI	X-Ray	Are X-ray services available?	Service Before: Yes, No Service Now: Yes, No Average Weekly Visits: Integer	Health Facility
		KI	Other diagnostic	Are any other diagnostic services available?	Service Before: Yes, No Service Now: Yes, No Average Weekly Visits: Integer	Health Facility
		KI	Other diagnostic community	Please list the diagnostic services available (including private within the community)	Text	Health Facility
<i>(Supplemental) What if any gaps are there with human resources, infrastructure, supplies, equipment, and WASH environment of health facilities serving the assessed population?</i>		KI	Essential Drugs and Supplies	Antibiotics	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	IV Fluids	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Mag Sulphate	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Analgesics	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Anticonvulsant	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	PEP	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Anti-hypertensives	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	ORS	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Oxytocin Injection	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Anti-malarials	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility

		KI	Essential Drugs and Supplies	Nutrition supplies	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	TB Meds	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	PPE for Staff (Gloves, Masks, etc.)	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	BCG vaccine	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Pentavalent vaccine	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Tetanus toxoid vaccine	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Polio vaccine	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Measles vaccine	Currently in Stock: Yes, No Stock out last 6 months: Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Does the facility have a functioning cold chain?	Yes, No	Health Facility
		KI	Essential Drugs and Supplies	Facility has functioning refrigerator or EPI cold box?	Yes, No	Health Facility
		KI	Essential Drugs and Supplies	If not, why not?	Text	Health Facility
		KI	Essential Drugs and Supplies	If any stock outs in the last 6 months, what caused it?	Text	Health Facility
		KI	Essential Drugs and Supplies	What immediate supply needs does this facility have, if any?	Text	Health Facility
<i>(Supplemental)* What morbidity and mortality</i>		KI, Health Information	Morbidity and Mortality	Total Deaths	Last 30 days: Integer Last 30-60 days: Integer	Health Facility

<i>patterns are observed from health facility data over the last 3 months?</i>		Systems, or Register Review			Last 60-90 days: Integer	
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Total Deaths <5 years of age	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Total Deaths >5 years of age	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #1 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #2 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #3 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #4 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information	Morbidity and Mortality	Main cause of death #5 for under-5	Last 30 days: Integer Last 30-60 days: Integer	Health Facility

		Systems, or Register Review			Last 60-90 days: Integer	
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #1 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #2 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #3 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #4 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main cause of death #5 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Total Illnesses/Cases	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information	Morbidity and Mortality	Total Illnesses/Cases <5 years of age	Last 30 days: Integer Last 30-60 days: Integer	Health Facility

		Systems, or Register Review			Last 60-90 days: Integer	
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Total Illnesses/Cases >5 years of age	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #1 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #2 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #3 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #4 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #5 for under-5	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information	Morbidity and Mortality	Main illness/symptom #1 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer	Health Facility

		Systems, or Register Review			Last 60-90 days: Integer	
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #2 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #3 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #4 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI, Health Information Systems, or Register Review	Morbidity and Mortality	Main illness/symptom #5 for 5+ years	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
		KI	Disease Outbreak	Have there been reports of a rapid/unusual increase in illness or rumours of outbreaks?	Text	Health Facility
		KI	Vulnerable Groups Disease	Are you aware of any groups of people that are more affected by disease and mortality than other populations in the area?	Text	Health Facility
		KI	Other Comment	Any other closing remarks by the health care staff?	Text	Health Facility

#### TOOL 4: FSL NGO WORKER INTERVIEW TOOL

Research questions	SUBQ#	Sub-question	Questionnaire QUESTION	Probes	Data collection method	Key disaggregations (Group types)
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<b>What is the severity of food security and livelihoods needs and service gaps in the population?</b>	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	What type of food security and/or livelihoods programming are currently being provided in Rubkona County?	General in-kind food distributions HH level in-kind food distribution Food vouchers Cash for food Multi-Purpose Cash Assistance In-kind inputs distribution Cash for inputs Livelihoods-related services Other, please specify	Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	When did each of these activities begin and when are they expected to end (month/year)?		Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	Which locations/sites are covered, and which are not covered?	Bentiu PoC Rubkona IDP sites Rotriak IDP camp Any other IDP sites/collective centers/ informal settlements? Host community?	Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	How is assistance different, if at all, for different areas/sites/population groups?	Different modality? Quantity? Duration?	by Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	What are your targeting and selection criteria for the programs mentioned above?		Key Informant Interview	None

		<i>FSL emergency services for the assessed population?</i>				
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	Do you know of any groups or specific locations/sites within the community who have difficulties accessing/registering to the program?	Returns? Host community? IDPs?	Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	If yes, can you tell us about the main barriers?		Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	Among the community you're reaching through your programs what are the main food and livelihoods needs you observe?		Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	Do you feel that the current level of assistance is sufficient to meet the needs in this area?		Key Informant Interview	None

	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	What are the other main challenges you observe in this community?		Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	Are you currently facing any major challenges in delivering your program/assistance to the intended population?	Funding? Access?	Key Informant Interview	None
	3.11	<i>What are the availability and barriers to provision of FSL emergency services for the assessed population?</i>	What is the plan for assistance delivery over the coming 6 months? How are FSL programming expected to change, if at all?		Key Informant Interview	None

#### TOOL 5: COMMUNITY OBSERVATION TOOL

Research questions	SUBQ#	Sub-question	Questionnaire QUESTION	Probes	Data collection method	Key disaggregations (Group types)
<b>What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?</b>	4.9	<i>What, if any, solid waste management, or other environmental threats to public health, issues are visible in the community?</i>	Do you observe people at home? If so...	<ul style="list-style-type: none"> <li>- Who is at home, if anyone?</li> <li>- If not at home, what are people doing?</li> <li>- What work are people doing?</li> <li>- Different for men and women?</li> </ul>	Observation	Data collection site
	4.9	<i>What, if any, solid waste management,</i>	Are there any parts of the community that	<ul style="list-style-type: none"> <li>- What services appear to have different access?</li> </ul>	Observation	Data collection site

		<i>or other environmental threats to public health, issues are visible in the community?</i>	appear to have different levels of access to water, sanitation, or other services?	- What observation makes you think so?		
	4.9	<i>What, if any, solid waste management, or other environmental threats to public health, issues are visible in the community?</i>	Are there any government, NGO or other response activities going on?	- Which partners? - Which activities?	Observation	Data collection site
	4.9	<i>What, if any, solid waste management, or other environmental threats to public health, issues are visible in the community?</i>	Are there any debris/rubble from damaged building?	- What buildings or infrastructure are damaged? - How are they damaged? - Are they still functional? - Are people still using them?	Observation	Data collection site
	4.9	<i>What, if any, solid waste management, or other environmental threats to public health, issues are visible in the community?</i>	Are there serious biological or chemical threats to public health exposed in public?	- Any animal carcasses? - Human or animal faeces? - Chemicals or industrial contaminants - Other?	Observation	Data collection site
	4.9	<i>What, if any, solid waste management, or other environmental threats to public health, issues are visible in the community?</i>	Are there visible piles of solid waste / garbage in the community?	- How is solid waste being disposed of? Are people burning or burying waste? - Are there waste bins or designated areas? - Who is collecting trash, if at all?	Observation	Data collection site

	4.9	<i>What, if any, solid waste management, or other environmental threats to public health, issues are visible in the community?</i>	Are there any other threats to public health you have observed?	- If so, please describe?	Observation	Data collection site
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## 7. Data Management Plan

Administrative Data			
Research Cycle name	<i>Integrated Public Health Rapid Assessments</i>		
Project Code	<i>32FOD</i>		
Donor	<i>FCDO</i>		
Project partners	<i>N/A</i>		
Research Contacts	<i>Jada Jacob, jada.jacob@impact-initiatives.org</i>		
Data Management Plan Version	<i>Date: February 2025</i>	<i>Version: 1</i>	
Related Policies	<i>[List any relevant policies/procedures on data management, data sharing and data security that this project will be based on]</i>		
Documentation and Metadata			
What documentation and metadata will accompany the data? <i>Select all that apply</i>	<input type="checkbox"/>	Data analysis plan	<input checked="" type="checkbox"/> Data Cleaning Log, including: <input checked="" type="checkbox"/> Deletion Log <input checked="" type="checkbox"/> Value Change Log
	<input type="checkbox"/>	Code book	<input type="checkbox"/> Data Dictionary
	<input type="checkbox"/>	Metadata based on HDX Standards	<input checked="" type="checkbox"/> Data saturation grid
Ethics and Legal Compliance			
Which ethical and legal measures will be taken?	<input checked="" type="checkbox"/>	Consent of participants to participate	<input checked="" type="checkbox"/> Consent of participants to share personal information with other agencies
	<input checked="" type="checkbox"/>	No collection of personally identifiable data will take place	<input checked="" type="checkbox"/> Gender, child protection and other protection issues are taken into account
	<input checked="" type="checkbox"/>	All participants reached age of majority	<input checked="" type="checkbox"/> PSS First Aid training of team leaders
Who will own the copyright and Intellectual Property Rights for the data that is collected?	IMPACT Initiatives		
Storage and Backup			
Where will data be stored and backed up during the research?	<input checked="" type="checkbox"/>	IMPACT/REACH Kobo Server	<input type="checkbox"/> Other Kobo Server: <i>[specify]</i>
	<input type="checkbox"/>	IMPACT Global Physical / Cloud Server	<input type="checkbox"/> Country/Internal Server
	<input type="checkbox"/>	On devices held by REACH staff	<input type="checkbox"/> Physical location <i>[specify]</i>
	<input type="checkbox"/>	<i>[Other, Specify]</i>	
Which data access and security measures have	<input checked="" type="checkbox"/>	Password protection on devices/servers	<input checked="" type="checkbox"/> Data access is limited to IMPACT HQ, REACH SSD Data Officer, and

been taken?			field team leader.		
	<input type="checkbox"/>	Form and data encryption on data collection server	<input type="checkbox"/> Partners signed an MoU if accessing raw data		
	<input type="checkbox"/>	[Other, Specify]			
Kobo Access Rights					
Account Name(s)	Person(s)	Type of Kobo access			
jadajacob	Jada Jacob	<input checked="" type="checkbox"/> View <input type="checkbox"/> Edit	<input type="checkbox"/> Submit Data <input type="checkbox"/> Download Data		
reach_ssd_nbeg	Enumerator	<input checked="" type="checkbox"/> View <input type="checkbox"/> Edit	<input checked="" type="checkbox"/> Submit Data <input type="checkbox"/> Download Data		
rchweya	Reagan Chweya	<input checked="" type="checkbox"/> View <input checked="" type="checkbox"/> Edit	<input type="checkbox"/> Submit Data <input checked="" type="checkbox"/> Download Data		
Raw Data Access Rights					
Raw Data Access	Reason	Person			
Accountable	Accountable – will download data daily and share with field teams for review.	Reagan Chweya			
Access	Access – will be supporting with data quality checks.	Joseph Falzetta			
Access	Access – will be conducting debriefs with enumerators in the field	Jada Jacob,			
Preservation					
Where will data be stored for long-term preservation?	<input type="checkbox"/> IMPACT / REACH Global Cloud / Physical Server	<input type="checkbox"/>	OCHA HDX		
	<input checked="" type="checkbox"/> REACH Country Server	<input type="checkbox"/>	[Other, Specify]		
Data Sharing					
Will the data be shared publically?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/>	No		
Will all data be shared?	<input type="checkbox"/> Yes	<input type="checkbox"/>	No, only anonymized/ cleaned/ consolidated will be shared		
	<input checked="" type="checkbox"/> conducting No				
Where will you share the data?	<input type="checkbox"/> REACH Resource Centre	<input type="checkbox"/>	OCHA HDX		
	<input type="checkbox"/> HumanitarianResponse	<input type="checkbox"/>	[Other, Specify]		
Data protection risk assessment					
Have you completed the Indicators Risk Assessment table below?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/>	No, no information that potentially allows identification of individuals is to be collected.		
Risk indicator (including direct and indirect identifiers)	Type of identification risk	Disclosure implications	Benefits	Class	Required mitigation
Coordinates of household location	Direct identification of household and whereabouts	Loss of privacy	Data checking	B1	To be permanently deleted after spatial verification and data cleaning.

First name of each household member.	<i>Direct identification of household members</i>	<i>Loss of privacy</i>	<i>Improve data quality for individual level indicators</i>	<i>B1</i>	<i>To be permanently deleted after data cleaning.</i>
<b>Responsibilities</b>					
Data collection	Jada Jacob: <a href="mailto:jada.jacob@reach-initiative.org">jada.jacob@reach-initiative.org</a>				
Data cleaning	Jada Jacob: <a href="mailto:jada.jacob@reach-initiative.org">jada.jacob@reach-initiative.org</a>				
Data analysis	Jada Jacob: <a href="mailto:jada.jacob@reach-initiative.org">jada.jacob@reach-initiative.org</a>				
Data sharing/uploading	Jada Jacob: <a href="mailto:jada.jacob@reach-initiative.org">jada.jacob@reach-initiative.org</a>				