

Research Terms of Reference

Integrated Public Health Rapid Assessment of Displacement Sites in Rubkona County
SSD2406
South Sudan

July 2024
V1

1. Executive Summary

Country of intervention	South Sudan				
Type of Emergency	<input checked="" type="checkbox"/>	Natural disaster	<input checked="" type="checkbox"/>	Conflict	<input type="checkbox"/> Other (<i>specify</i>)
Type of Crisis	<input type="checkbox"/>	Sudden onset	<input type="checkbox"/>	Slow onset	<input checked="" type="checkbox"/> Protracted
Mandating Body/ Agency	BHA				
IMPACT Project Code	32FOD				
Overall Research Timeframe (<i>from research design to final outputs / M&E</i>)	08/07/2024 to 23/08/2024				
Research Timeframe <i>Add planned deadlines</i>	1. Pilot/ training: 16/07/2024		6. Preliminary presentation: N/A		
	2. Start collect data: 18/07/2024		7. Outputs sent for validation: 19/08/2024		
	3. Data collected: 26/07/2024		8. Outputs published: 23/08/2024		
	4. Data analysed: 02/08/2024		9. Final presentation: NA		
	5. Data sent for validation: 02/08/2024				
Humanitarian milestones <i>Specify what will the assessment inform and when</i> <i>e.g. The shelter cluster will use this data to draft its Revised Flash Appeal;</i>	Milestone		Deadline (can be tentative)		
	<input checked="" type="checkbox"/>	Donor plan/strategy	ASAP		
	<input checked="" type="checkbox"/>	Inter-cluster plan/strategy	Late September / early October 2024		
	<input checked="" type="checkbox"/>	Cluster plan/strategy	ASAP		
	<input type="checkbox"/>	NGO platform plan/strategy	N/A		
	<input checked="" type="checkbox"/>	IPC	Late September / early October 2024		
Audience Type & Dissemination <i>Specify who will the assessment inform and how you will disseminate to inform the audience</i>	Audience type		Dissemination		
	<input checked="" type="checkbox"/> Strategic <input checked="" type="checkbox"/> Programmatic <input type="checkbox"/> Operational <input checked="" type="checkbox"/> Advocacy	<input checked="" type="checkbox"/> General Product Mailing (e.g. mail to NGO consortium; HCT participants; Donors) <input checked="" type="checkbox"/> Cluster Mailing (Education, Shelter and WASH) and presentation of findings at next cluster meeting <input checked="" type="checkbox"/> Presentation of findings (e.g. at HCT meeting; Cluster meeting) <input checked="" type="checkbox"/> Website Dissemination (Relief Web & REACH Resource Centre) <input type="checkbox"/> [Other, Specify]			

Stakeholder mapping <i>Has a detailed stakeholder mapping been conducted during research design to identify all actors that could contribute to and/or benefit from the research?</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
General Objective	<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 the six largest IDP sites in Rubkona County.</i>	
Specific Objective(s)	<p>Population Demographics</p> <ul style="list-style-type: none"> <i>To understand the demographic composition of the target population.</i> <p>Health</p> <ul style="list-style-type: none"> <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> <i>To understand the main barriers for the target population in accessing health and nutrition services.</i> <i>To estimate the coverage of Vitamin A supplementation among children 6-59 months of age</i> <i>To estimate the coverage of measles vaccination among children 9-59 months of age</i> <i>To estimate the coverage of oral cholera vaccinations among people 5+ years of age</i> <p>Food Security & Livelihoods</p> <ul style="list-style-type: none"> <i>To estimate the proportion of the target population experiencing food consumption gaps, both in terms of quantity and diversity.</i> <i>To estimate the proxy coverage of emergency food security interventions in the target population.</i> <i>To understand the availability and utilization of food at the household level.</i> <i>To understand the main barriers for the target population in accessing food.</i> <i>To estimate the proportion of the population using livelihoods based coping strategies to access food, or other basic needs, and their severity.</i> <p>Water, Sanitation, and Hygiene</p> <ul style="list-style-type: none"> <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> <i>To estimate the proportion of the population with access to improved sanitation facilities</i> <i>To understand the main barriers for the target population in accessing water.</i> <i>To estimate the proportion of households with access to basic WASH NFIs.</i> <p>Shelter and NFIs</p> <ul style="list-style-type: none"> <i>To assess the main shelter types being used by the population.</i> <i>To assess the prevalence of shelter damage among the population.</i> <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> 	
Research Questions	<p>RQ1 - What is the demographic composition of the population?</p> <ul style="list-style-type: none"> <i>RQ 1.1 – What is the sex and age distribution of the assessed population?</i> <p>RQ2 – What is the severity of health needs and service gaps in the population?</p> <ul style="list-style-type: none"> <i>RQ 2.1 - What proportion of the population is experiencing unmet health care needs in the two weeks prior to data collection?</i> <i>RQ 2.2 – How do these unmet needs differ by sex, age, and symptom?</i> <i>RQ 2.3 – What are the self-reported perceptions of health needs and access to care in the assessed population?</i> 	

- RQ 2.4 – What are the availability of services at health facilities serving the assessed population?
- 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?
- RQ 2.6 – What proportion of children 6-59 months have received Vitamin A supplementation in the last 6 months?
- RQ 2.7 – What proportion of children 9-59 months have received any measles vaccination?
- RQ 2.8 – What proportion of people 5 years and older have received any cholera vaccination?

RQ 2 - What is the severity of food security and livelihoods needs and service gaps in the population?

- RQ 2.1 – What is the proportion of households in the assessed population experiencing food consumption gaps in terms of quantity and diversity?
- RQ 2.2 – What are the self-reported perceptions of food needs in the assessed population?
- RQ 2.3 – What is the household coverage of emergency food security interventions in the assessed population?
- RQ 2.4 – What are the main sources of food utilized by the assessed population in the last 7 days?
- RQ 2.5 – What are the main sources of water and fuel utilized by households for cooking in the assessed population?
- RQ 2.6 – What are the main sources of income of the assessed population in the last 30 days?
- RQ 2.7 – 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?
- RQ 2.8 – What is the availability of critical food and non-food items within markets used by the assessed population?
- RQ 2.9 – What are the availability and barriers to provision of FSL emergency services for the assessed population?

RQ 3 – What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?

- RQ 3.1 – What proportion of households have access to safe, improved drinking water in the assessed population?
- RQ 3.3 – What proportion of households can collect water within 30 minutes, including travel to, from, and queuing time?
- RQ 3.4 – What kinds of water treatment methods are households in the assessed population using?
- RQ 3.5 – What are the self-reported perceptions of water needs and barriers to access in the assessed population?
- RQ 3.6 – What proportion of households in the assessed population have access to improved sanitation facilities?
- RQ 3.7 – What proportion of households in the assessed population have access to basic WASH NFIs, such as water containers, soap, and mosquito nets?

RQ 4 – What are severity of the Shelter and NFIs needs and service gaps in the population?

- RQ 4.1 – What types of shelter are the assessed population living in?
- RQ 4.2 – What are the self-reported perceptions of shelter and NFI needs in the assessed population?

RQ 5 – What are the community's self-perceived priority needs and humanitarian assistance?

- RQ 5.1 – What are the self-reported priority needs for the population?
- RQ 5.2 – Are there any perceived safety concerns for the assessed population?

Geographic Coverage	(1) Bentiu IDP camp, (2) Rotriak IDP camp, and (3) Sites A, B, C, and Kurkaal Rubkona County, Unity State.			
Secondary data sources	South Sudan Camp Coordination and Camp Management Cluster IDP site master list, June 2024 Integrated Phase Classification for Acute Food Insecurity, September 2023 to July 2024 Integrated Phase Classification for Acute Malnutrition, October 2023 to June 2024 REACH. Emergency Food Security Update: Rubkona County. November 2023. FEWS NET Updates on Acute Food Insecurity REACH. Integrated Public Health Rapid Assessment Guidance. IOM DTM Village Assessment Various unpublished humanitarian assessments			
Population(s)	<input checked="" type="checkbox"/>	IDPs in camp	<input checked="" type="checkbox"/>	IDPs in informal sites
<i>Select all that apply</i>	<input 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 type="checkbox"/>	Host communities	<input type="checkbox"/>	
Stratification <i>Select type(s) and enter number of strata</i>	<input checked="" type="checkbox"/>	Geographical #: 3 Population size per strata is known? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/>	Group #: N/A Population size per strata is known? <input 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
Data collection tool(s)	Sampling method		Data collection method	
Tool 1: Household Survey Module <i>Select sampling and specify target # interviews</i>	<input type="checkbox"/> Probability / Simple random <input checked="" type="checkbox"/> Probability / Stratified simple random <input type="checkbox"/> Probability / Random Location Sampling (RLC)		<input checked="" type="checkbox"/> Household interview (Target #): 321 (107 per geographic strata)	
Target level of precision if probability sampling for household survey	95% level of confidence		+/- 10% margin of error	
Tool 2: Community Leader Key Informant Interview <i>Select sampling method and specify target # interviews</i>	<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 #): 3-5 KIIs with community leaders – at least 1 per geographic strata.	
Tool 3: Health Facility Key Informant Interview	<input checked="" type="checkbox"/> Purposive <input type="checkbox"/> [Other, Specify]		<input checked="" type="checkbox"/> Key informant interviews (Target #): 2-3 KIIs with healthcare providers	
Tool 4: FSL Assistance Provider Key Informant Interview	<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	
Tool 5: Community Observation	<input checked="" type="checkbox"/> Purposive		<input checked="" type="checkbox"/> Direct observations (Target #): 6 (1 per IDP site)	
Disaggregation by gender and age <i>Are you planning to conduct sex/age disaggregated analysis?</i>	Gender		Age	
	<input type="checkbox"/>	Yes	<input type="checkbox"/>	Yes
	<input checked="" type="checkbox"/>	No	<input checked="" type="checkbox"/>	No

Data management platform(s)	<input checked="" type="checkbox"/>	IMPACT	<input type="checkbox"/>	UNHCR
Expected output type(s)	<input type="checkbox"/>	Situation overview #: __	<input checked="" type="checkbox"/>	Report #: 1
	<input checked="" type="checkbox"/>	Presentation (Preliminary findings) #: 1	<input type="checkbox"/>	Presentation (Final) #: __
	<input type="checkbox"/>	Interactive dashboard #: __	<input type="checkbox"/>	Webmap #: __
Access	<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)		
Visibility <i>Specify which logos should be on outputs</i>	REACH			
	Donor: BHA			
	Coordination Framework: NA			
	Partners: NA			

2. Rationale

2.1 Background

Available evidence suggests that the humanitarian situation in Rubkona County is exceptionally severe. In the latter half of 2023, the Food Security and Nutrition Monitoring System (FSNMS) Round 29 estimated a Global Acute Malnutrition (GAM) prevalence of 28.1% - approaching the acute malnutrition prevalence consistent with famine – while the October 2023 IPC projected that the GAM rate would surpass the “extremely critical” threshold (30%) between April and June 2024. Qualitative assessments conducted by REACH in the second half of 2023 corroborate extremely high needs. Assessments have identified the use of extreme coping strategies to mitigate large food consumption gaps, including migration of household members into active conflict zones, the near-exclusive consumption of water lilies, sex work, and the near-total liquidation of household assets. An unpublished assessment conducted with a health actor in Bentiu and shared bilaterally with REACH reports that all but one WASH partner has departed the county, creating serious health risks and undermining the dignity and wellbeing of community members.

The population of Rubkona is characterized by a number of severe underlying vulnerabilities. The county hosts roughly 175,000 internally displaced people – the highest of any county in South Sudan, and has received tens of thousands of additional arrivals from Sudan since the outbreak of conflict there in April 2023. Assessments conducted in 2023 found that largescale arrivals have precipitated the spread of disease, strained already limited household food stocks, and placed immense pressure on the limited resources of humanitarian service providers. For much of the population, access to traditional subsistence livelihoods is negligible. FSNMS R29 found that just 8% of the population had access to land for cultivation and 4% owned livestock, while large swathes of the county remain inundated by water from floods between 2021 and 2022. Humanitarian conditions are likely to deteriorate further over the second half of 2024 as major flooding is projected to affect the area.

2.2 Intended impact

This assessment aims to determine the extent of humanitarian needs across several public health sectors, for internally displaced people residing within displacement sites (both camps and informal sites) in Rubkona County (Unity State), as well as outline access to humanitarian services, and identify service gaps. Findings will enable evidence-based advocacy on behalf of a highly vulnerable population group, and inform national-level decision making processes. These processes include the Integrated Phase Classification workshop, scheduled for October 2024, as well as the Needs and Analysis

Working Group (NAWG) which is held on a monthly basis, and used to inform the national Inter-Cluster Coordination Group (ICCG). Additional bilateral advocacy may also be conducted on an ad-hoc basis to relevant clusters or working groups.

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 have core and supplemental indicators.

From this IPHRA package, this assessment will employ a **multi-sectoral household survey with displaced households residing in formal and informal sites, key informant interviews** with humanitarian service providers and community leaders, and a **community observation checklist**.

The household survey **will be conducted using a stratified simple random sampling design**, intended to provide *localized* results which are not generalizable beyond the assessed population. The population of interest – internally displaced persons residing in sites – will be divided into **three geographic strata**, 1. Residents of the Rotriak IDP camp, 2. Residents of the Bentiu IDP camp (formerly the Bentiu “protection of civilians site” or “PoC”), and 3. Residents of other IDP sites in Bentiu and Rubkona Towns. These three strata have been delineated based on the assumption that they are roughly homogenous population groups, i.e. that they have similar access to services such as healthcare and humanitarian food assistance, and are subject to similar standards of living conditions i.e. population density, and sanitation and hygiene conditions. Strata were delineated based on input from locally operating humanitarian service providers. Across these three strata, 321 household surveys will be conducted (107 per strata).

Within these three strata, households will be randomly selected using the REACH Georand GIS tool (more below in “household selection” section). Community key informants will be purposively selected based on input from camp management aid workers, and service provider key informants (including healthcare providers), will be identified through standard humanitarian coordination networks (i.e. snowball sampling). Community observation checklists will be conducted in each of the 6 assessed sites, and between 9 and 15 key informants will be interviewed.

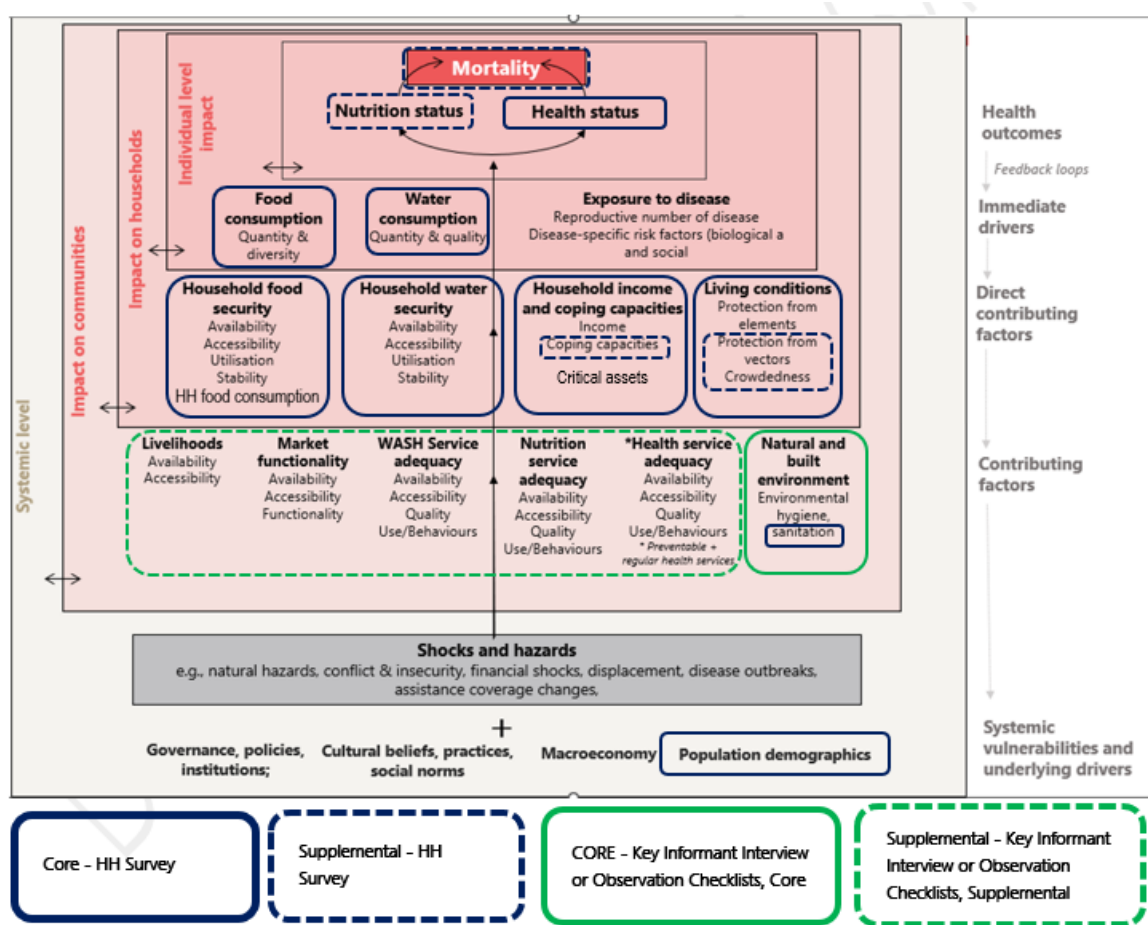
3.2 Population of interest

The population of interest for this IPHRA are internally displaced persons (IDPs) residing within formal camps and informal sites in Rubkona County. Previous assessments indicate that IDPs in Rubkona County are characterized by extremely limited access to self-sustaining livelihood activities, widespread engagement in unsustainable or harmful coping strategies, large food consumption gaps, highly congested and unsanitary living conditions, and otherwise limited coping capacity. Further, former Protection of Civilian sites (PoCs), such as the Bentiu IDP camp, are historically omitted from the FSNMS sample, and therefore omitted from the broader IPC analysis, which underpins the annual allocation of humanitarian food assistance. This assessment therefore will provide granular information on the humanitarian needs of a large and highly vulnerable population group in a highly fluid and high-risk area.

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 June 2024 CCCM Cluster IDP site master list. 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, June 2024	<ul style="list-style-type: none"> Delineation of sampling frame and strata; demographic breakdown of population.
REACH. Various reports and briefings – August 2023 to December 2024 for example: Emergency Food Security Update, November 2023. Integration and social cohesion in areas of return. Rubkona County. April 2024. Rapid food security assessment in areas of return. September 2023.	<ul style="list-style-type: none"> Building contextual understanding of humanitarian needs and shock profile.
UN International Office of Migration (IOM) – Rubkona Village Assessment Survey. October 2023. Joint Market Monitoring Initiative Dashboard and Data sets.	<ul style="list-style-type: none"> Building understanding of available services, infrastructure, context, and shock profile. Background information on market functionality, and prices.

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

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

Site Selection Methods

Of the sites identified by secondary literature review and consultation with humanitarian partners on the ground, eight have been purposively selected. These eight sites will serve as 3 distinct geographic strata – 2 standalone sites (the Bentiu IDP site, and Rotriak IDP site), and one grouping of 6 sites (sites A, B C, D1, D2, and E) - and findings will be presented separately for each stratum. The first stratum comprises the Bentiu IDP camp, formerly the Protection of Civilians site, the largest site in the county, with a population of 99,519 people. The second stratum comprises the Rotriak IDP camp, which has a population of roughly 44,536 people, and is the second largest site. The third stratum comprises 6 sites, which have been grouped together based on their relative proximity and reportedly similar access to services, and have a combined population of 41,047 people. Together, these eight sites comprise over 90% of the in-site IDP population of Rubkona County. The omission of additional informal displacement sites in Bentiu and Rubkona Towns are due to limited human, logistical and financial resources.

Sampling

For the multi-sectoral household-level indicators, the sample size was calculated assuming an infinite population and using the assumptions of 95% confidence level, 50% estimated proportion for household indicators, and 10% margin of error. The required sample per strata is 97 households per stratum, and 107 households per stratum with the addition of a 10% buffer for non-responses or poor quality surveys. This comes out to a total sample of 321 households across the three strata with a buffer included.

Table 2: Population and sample size per stratum. Source: CCCM Cluster. June 2024.

Strata 1: Bentiu IDP Camp (xPOC)				
Sub-area	Population	% of total	Sample	Geopoints
Sector 1	13,209	13%	14	5
Sector 2	17,643	17%	18	6
Sector 3	26,698	26%	28	9
Sector 4	18,385	18%	19	6
Sector 5	26,206	26%	27	9
Total	102,141	100%	107	37

Strata 2: Rotriak IDP Camp				
Sub-area	Population	% of total	Sample	Geopoints
N/A	44,536	100%	107	37
Total	44,536	100%	107	37

Strata 3: Rubkona Town IDP Sites				
Sub-area	Population	% of total	Sample	Geopoints
Site A	10,360	25%	27	9
Site B	9,117	22%	24	8
Site C	7,943	19%	21	7
Site D1	3,298	8%	9	3
Site D2	4,706	11%	12	4
Site E	5,623	14%	15	5
Total	41,047	100%	107	36

GRAND TOTAL	202,187	100%	321	111
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Sampling proportionally to size will be employed in Benitu IDP Camp and the Rubkona Town IDP sites. This is due to the availability of sub-areas within the strata, such as sectors within the Benitu IDP camp or individual sites, which enables a more equal spread of the sample throughout the strata, and supports a more timely and efficient data collection process. Proportional sampling will not be employed in Rotriak IDP Camp because there are no discernible sub-areas within the site.

Household selection methods

Within selected sites, households will be sampled using accepted methods in emergencies to as best as possible give each household within the site an equal probability of selection. The household definition for this assessment is:

“A group of people who ate from the same cooking pot and slept under the same roof the previous night”

Using the REACH GeoRand tool, the boundary of each site will be delineated, and random GPS points generated within the site's boundary. The number of random points created will be the number of required households divided by three; so in order to survey 330 target households, then at least 110 random GPS points are needed over the assessment area (at least 37 per strata). 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 (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 instead 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.

Team Composition and Data Collection

One household survey team will consist of at least 1 field supervisor and 3 enumerators (9 enumerators and 3 supervisors total). Teams will receive a two-day training prior to data collection covering 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, anthropometry, or mortality 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 10 days. For security and operational reasons, all three teams will complete data collection within a single stratum before moving to the next.

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	1-3 community leaders
Supplemental	Health service provider KII	Health Service Adequacy	2 – 3 key informant interviews
	Nutrition service provider KII	Nutrition Service Adequacy	2 -3 key informant interviews
	FSL Assistance Provider KII	Emergency FSL Programming Adequacy	2 – 3 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
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Core	Community Observation Checklist	Natural and Built Environment; Living Conditions;	1 per assessment location
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One observation checklist will be conducted at each assessed site. In the case of much larger sites, such as the Bentiu IDP camp, which hosts roughly 100,000 people, the observation check lists 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 against household survey results to triangulate perceive 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 1: Example Integrated Analysis Table

Category	Domain	Severity		
		Group 1	Group 2	Group 3
Health Outcomes	Mortality	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
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 (although representative per strata) shouldn't be generalized to a wider population beyond the sites and facilities assessed.
- **Likely not reaching saturation** – For the qualitative components, sample sizes are likely not adequate to reach a full saturation of responses in the population. The intent of these is to provide some light-touch information to triangulate with household survey results.

4. Key ethical considerations and related risks

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

The proposed research design...	Yes/ No	Details if no (including mitigation)
... Has been coordinated with relevant stakeholders to avoid unnecessary duplication of data collection efforts?	Yes	
... Respects respondents, their rights and dignity (<i>specifically by: seeking informed consent, designing length of survey/ discussion while being considerate of participants' time, ensuring accurate reporting of information provided</i>)?	Yes	

... Does not expose data collectors to any risks as a direct result of participation in data collection?	Yes	
... Does not expose respondents / their communities to any risks as a direct result of participation in data collection?	Yes	
... Does not involve collecting information on specific topics which may be stressful and/ or re-traumatising for research participants (both respondents and data collectors)?	Yes	
... Does not involve data collection with minors i.e. anyone less than 18 years old?	Yes	
... Does not involve data collection with other vulnerable groups 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 personally identifiable information ?	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

<i>Task Description</i>	<i>Responsible</i>	<i>Accountable</i>	<i>Consulted</i>	<i>Informed</i>
Research design	Emergencies Assessment Specialist (E-AS)	E-AS	HQ Public Health Unit (PHU), HQ Research Department (RD), Nutrition Information Working Group (NIWG)	South Sudan Country Coordinator (CC); South Sudan Deputy Country Coordinator (DCC)
Supervising data collection	Nutrition SAO (N-SAO), REACH	E-AS	DCC	CC

	SAO, (SAO) Senior Field Officer (SFO)			
Data processing (checking, cleaning)	N-SAO, SAO	E-AS	PHU	CC
Data analysis	Data Officer (DO), SAO	E-AS	PHU, DCC	CC
Output production	SAO, E-AS	E-AS	DCC, PHU, RD	CC
Dissemination	SAO, E-AS	E-AS	DCC	CC
Monitoring & Evaluation	SAO	E-AS	PHU	CC
Lessons learned	SAO	E-AS	PHU	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	HH

					Surface water (river, dam, lake, pond, stream, canal, irrigation channel) Other (specify) Don't know Prefer not to answer	
	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 Coal (charcoal, mineral charcoal) Electricity Biogas Gas Straw or other feed Other (specify) Don't know Prefer not to answer	HH
What are the main barriers to accessing food for the assessed population? What are the self-reported perceptions of food needs in the assessed population?	A.1.20	HH Interview	Barriers to Food Accessibility	In the last 7 days, did you face any barriers to consistently accessing food sources?	No barrier faced accessing food sources Live too far from food sources/no means of transport. Transportation to food source too expensive. Not enough food is available Damage to main source of food Security issues travelling to and from food sources. Not allowed to access main food sources (cultural, social, etc. reasons) Other (specify) Don't know Prefer not to answer	HH
What is the household coverage of emergency food security interventions in the assessed population?	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?	Food In-Kind Food vouchers Livelihoods (inputs) voucher Multi Purpose Cash Assistance Cash for food Cash for livelihoods (inputs, assets, etc) Other (specify) None Prefer not to answer	HH
What are the main sources of income of the assessed population in the last 30 days?	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	HH

	A.1.24	HH Interview	Main income sources	What are your household's second main source of income in the past 30 days?	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
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?	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 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
	A.1.26	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?		HH
	A.1.27	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
	A.1.28	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
	A.1.29	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
	A.1.30	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
	A.1.31	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
	A.1.32	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
	A.1.33	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
	A.1.34	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
What proportion of households have access to safe,	A.2.0	HH Interview	Main sources of water	What is the main source of water used by your household for drinking or other household uses?	Piped into dwelling Piped into compound, yard or plot Piped to neighbour	HH

improved drinking water in the assessed population? What is the average and median liters per person per day consumed in the assessed population?				What are the other sources of water you use for drinking or other household uses?	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	
	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 water will last your household before needing to collect more water? (number of days)	Number	HH
What proportion of households can collect water within 30 minutes, including travel to, from, and queuing time?	A.2.7	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
What of water treatment methods are households in the assessed population using?	A.2.8	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
What are the self-reported perceptions of water needs and barriers to access in the assessed population?	A.2.9	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
	A.2.10	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
	A.2.11	HH Interview	Water Stability	If yes, how many days with any water interruption?	Number	HH
What proportion of households in the assessed population have access to improved sanitation facilities?	A.2.12	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	HH

					Plastic Bag Bucket Hanging toilet/hanging latrine No facility/bush/field Other Prefer not to answer Ventilated improved pit latrine (with slab) [DEPENDING ON CONTEXT] Twin pit latrine with slab [DEPENDING ON CONTEXT] Container based sanitation [DEPENDING ON CONTEXT]	
	A.2.13	HH Interview	People per latrine	Do you share this facility with others who are not members of your household?	Yes, No	HH
	A.2.14	HH Interview	People per latrine	If yes, how many households in total use this toilet facility, including your own household?	Number	HH
	A.2.15	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>	A.3.0	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>	A.3.1	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 Lack of privacy inside the shelter (no partitions, doors) Lack of space inside shelter (min 3.5m2 per household member) Shelter is too cold Shelter is too hot Limited ventilation (no air circulation unless main entrance is open) Leaks during rain Unable to lock the shelter Lack of lighting inside or outside the shelter	HH
	A.3.2	HH Interview	NFI needs	Are members of your household able to cook where you live?	Yes, without any issues Yes, with issues No, can't do	HH
	A.3.3	HH Interview	NFI needs	Please explain why you can't cook / the issues you face for cooking?	Insufficient essential household items for cooking	HH

				(utensils, kitchen sets, eating sets) Lack of access to cooking facilities Unsafe cooking facilities Inadequate space for cooking (leaks during rain) Insufficient space Insufficient cooking fuel Other (specify) Prefer not to answer	
A.3.4	HH Interview	NFI needs	Are members of your household able to sleep where you live?	Yes, without any issues Yes, with issues No, can't do	HH
A.3.5	HH Interview	NFI needs	Please explain why you can't sleep / the issues you face for sleeping?	Insufficient essential household items for sleeping (bedding, mattresses and mats, bednets) Insufficient space Unsafe space Inadequate space for sleeping (leaking during rain, noisy space, space not meant for sleeping) Other (specify) Prefer not to answer	HH

TOOL 1: HEALTH AND NUTRITION

Research questions	IN #	Data collection method	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
<p>What proportion of the population is experiencing unmet health care needs in the two weeks prior to data collection?</p> <p>How do these unmet needs differ by sex, age, and symptom?</p>	A.4.0	HH Interview	Unmet health care 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.4.1	HH Interview	Unmet health care 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.4.2	HH Interview	Unmet health care 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.4.3	HH Interview	Unmet health care needs	If yes, where did the individual 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
What are the self-reported perceptions of health and nutrition needs and access to care in the assessed population?	A.4.4	HH Interview	Health care 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	HH

					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	
	A.4.5	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
What proportion of people 5 years and older have received any cholera vaccination?	A.4.6	HH Interview	Cholera vaccination	Has the individual an received oral cholera vaccination with the last 12 months?	Yes from maternal recall Yes from vaccination card /record No Don't know	Individual
What proportion of children 9-59 months have received any measles vaccination?	A.4.7	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
What proportion of children 6-59 months have received Vitamin A supplementation in the last 6 months?	A.4.8	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)
What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?	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;
What is the severity of food security and livelihoods needs and service gaps in the population?	3.2	<i>What are the self-reported perceptions of food needs in the assessed population?</i>	(Food) Do people have a serious problem with food? For example, because they do not have enough food, or good enough food, or because you are not able to cook food	If yes, please describe the problem? Who has this problem? If yes, what are the main barriers preventing the community from accessing enough food, or good enough?	Key informant interview	Community leader vs. member; Sex; Assessment Site;
What are severity of the Shelter and NFIs needs and service gaps in the population?	5.2	<i>What are the self-reported perceptions of shelter and NFI needs in the</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;

		<i>assessed population?</i>				
What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?	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;
What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?	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 or a suitable place to wash	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;
What are severity of the Shelter and NFIs needs and service gaps in the population?	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;
What is the severity of food security and livelihoods needs and service gaps in the population?			(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;
What is the severity of health and nutrition needs and service gaps in the population?	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;
What is the severity of health and nutrition needs and service gaps in the population?	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 adequate health care for themselves? For example, treatment or medicines, or health care during pregnancy or childbirth.	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;

What are the community's self-perceived priority needs and humanitarian assistance?	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 patterns are observed from health</i>	KI, Health Information Systems, or Register Review	Morbidity and Mortality	Total Deaths	Last 30 days: Integer Last 30-60 days: Integer Last 60-90 days: Integer	Health Facility
	KI, Health Information	Morbidity and Mortality	Total Deaths <5 years of age	Last 30 days: Integer Last 30-60 days: Integer	Health Facility

[illegible]

		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)
What is the severity of food security and livelihoods needs and service gaps in the population?	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 by modality? Quantity? Duration?	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
	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?	Returnees? Host community? IDPs?	Key Informant Interview	None
	3.11	<i>What are the availability and barriers to</i>	If yes, can you tell us about the main barriers?		Key Informant Interview	None

	<i>provision of 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>	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)
What is the severity of Water, Sanitation, and Hygiene needs and service gaps in the population?	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"> - Who is at home, if anyone? - If not at home, what are people doing? - What work are people doing? - Different for men and women? 	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 parts of the community that appear to have different levels of access to water, sanitation, or other services?	<ul style="list-style-type: none"> - What services appear to have different access? - What observation makes you think so? 	Observation	Data collection site
	4.9	<i>What, if any, solid waste management,</i>	Are there any government, NGO or other response activities going on?	<ul style="list-style-type: none"> - Which partners? - Which activities? 	Observation	Data collection site

	<i>or other environmental threats to public health, issues are visible in the community?</i>				
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?	<ul style="list-style-type: none"> - 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?	<ul style="list-style-type: none"> - 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?	<ul style="list-style-type: none"> - 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?	<ul style="list-style-type: none"> - If so, please describe? 	Observation	Data collection site