

Research Terms of Reference

Assessment of Hard to Reach (H2R) Areas (Phase 2)

Research Cycle ID: NGA1809

Nigeria

December 2019
2.0

REACH Informing
more effective
humanitarian action

1. Executive Summary

Country of intervention	Nigeria		
Type of Emergency	<input type="checkbox"/> Natural disaster	<input checked="" type="checkbox"/> Conflict	
Type of Crisis	<input type="checkbox"/> Sudden onset	<input type="checkbox"/> Slow onset	<input checked="" type="checkbox"/> Protracted
Mandating Body/ Agency	The Inter-Sector Working Group (ISWG), and in close coordination with relevant actors including UN OCHA, Access Working Group (AWG), Information Management Working Group (IMWG) and IOM-DTM/ ETT.		
Project Code	35iAGQ-35iAIW		
Overall Research Timeframe (from research design to final outputs / M&E)	01 /05/2019 to ongoing		
Research Timeframe <i>Monthly outputs (factsheets)</i>	1. Start collect data: end of 1 st week of 1 st month	5. Preliminary presentation: 3 rd week of 2 nd month	
	2. Data collected: throughout month (stops by 29 th)	6. Outputs sent for validation: end of 3 rd week of 2 nd month	
	3. Data analysed: end of 1 st week of 2 nd month	7. Outputs published: end of 4 th week of 2 nd month	
	4. Data sent for validation: beginning of 2 nd week of 2 nd month	8. Final presentation: By the end of 2 nd month	
Research Timeframe <i>Bimonthly outputs (situation overviews)</i>	1. Start collect data: start of the 1 st month	5. Preliminary presentation: 1 st week of 4 th month	
	2. Data collected: end of the 2 nd month	6. Outputs sent for validation: 1 st week of 4 th month	
	3. Data analysed: end of 1 st week of 3 rd month	7. Outputs published: 2 nd week of 4 th month	
	4. Data sent for validation: beginning of 2 nd week of 3 rd month	8. Final presentation: 3 rd week of 4 th month	
Number of assessments	<input type="checkbox"/> Single assessment (one cycle)		
	<input checked="" type="checkbox"/> Multi assessment (more than one cycle) <i>Monthly</i>		
Humanitarian milestones	Milestone	Deadline	
	<input checked="" type="checkbox"/> Donor plan/strategy	ECHO/OFDA strategy, end of the year	

Specify what will the assessment inform and when e.g. The shelter cluster will use this data to draft its Revised Flash Appeal;	X	Inter-cluster plan/strategy UN OCHA HNO & HRP	REACH will feed H2R data to support the 2021 Nigeria Humanitarian Needs Overview and Humanitarian Response Plan.
		ISWG	Monthly findings to be presented at the ISWG.
	<input type="checkbox"/>	Cluster plan/strategy	--/ /----
	<input type="checkbox"/>	NGO platform plan/strategy	regular presentations to INGO Forum
X	CH Analysis Workshop	REACH through participation in bi-annual CH analysis workshops and FSL WASH/Nutrition/health analysis working group will provide timely updates and participation in analysis to identify areas with highest levels / highest risk levels of severe/extreme food insecurity	
Audience Type & Dissemination Specify who will the assessment inform and how you will disseminate to inform the audience	Audience type		Dissemination
	X Strategic	X Programmatic	X Operational
	<input type="checkbox"/> [Other, Specify]		
			X General Product Mailing (e.g. REACH Nigeria mailing list, which includes sectoral and inter-sectorial coordination mail to NGO consortium; OHCT participants; donors)
			X Cluster Mailing
			X Presentation of findings at Cluster meetings
			X Website Dissemination (Relief Web, REACH Resource Centre, & HDX)
			X Following the 6th month of data collection, monthly sectoral factsheets and data sets reporting on conditions at the LGA level (6 total)
Detailed dissemination plan required	X	Yes	<input type="checkbox"/> No
General Objective	To assist humanitarian actors in making more informed decisions about the scale, scope and location of the humanitarian response through providing detailed information and longitudinal analysis on humanitarian needs, displacement dynamics, and service access in hard-to-reach areas in Nigeria.		
Specific Objective(s)	<ol style="list-style-type: none"> 1. To identify the cross-sectoral needs and vulnerabilities of populations in hard-to-reach areas, whether they are Internally displaced persons (IDP), returnees or host community members. 2. To provide up-to-date information on service provision and access in hard-to-reach areas. 3. To map main displacement patterns to and from hard-to-reach areas. 		
Research Questions	<ul style="list-style-type: none"> • What are the needs and vulnerabilities of IDP, returnee and host community populations in hard-to-reach areas with regards to Food Security and Livelihoods 		

	<p>(FSL), Health, Nutrition, Shelter & Non-Food Items (NFIs), WASH, Education and Protection and how do these change over time? ¹</p> <ul style="list-style-type: none"> To which services and type of humanitarian assistance do IDP, returnee and host community populations in hard-to-reach areas have access and what access constraints exist? What are the key demographic characteristics (e.g. type of populations present such as IDPs, returnees, etc) of populations living in H2R areas/settlements? What are the key displacement trends in North-east Nigeria (push and pull factors for new arrivals, month and area of origin of IDP arrivals, intentions to move, etc.)? 			
Geographic Coverage	<ul style="list-style-type: none"> H2R settlements in Local Government Areas (LGAs) across Borno (primarily), Adamawa and Yobe States Data collection will take place in secure locations, primarily garrison towns, in the following LGAs: Jere/MMC, Monguno, Gwoza, Mafa, Bama, Dikwa, Ngala, with a potential for expansion to Mobbar, Kala/Balge, Mubi and Gujba. As H2R areas become accessible to humanitarian actors, REACH will conduct rapid needs assessments to more clearly identify conditions in those areas, which will be determined as accessibility permits. 			
Secondary data sources	<ul style="list-style-type: none"> UN OCHA, WFP humanitarian needs overviews / situation reports IOM Displacement Tracking Matrix (DTM) WFP Monthly price monitoring ACLED, INSO Sector-led assessments as available in reference to H2R and surrounding areas (FS, WASH, Education, Health, Nutrition, etc.) Partner-led assessments as available in reference to H2R and surrounding areas (Save the Children, Plan, MSF etc) Academic papers Online media sources 			
Population(s) <i>Select all that apply</i>	X	IDPs in camp	X	IDPs in informal sites
	X	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 [Other, Specify]
	X	Host communities	X	Returnees
Stratification <i>Select type(s) and enter number of strata</i>	X	Geographical # 12 LGAs in Borno State Population size per strata is known? <input type="checkbox"/> Yes X No Threshold for reporting at LGA level	<input type="checkbox"/>	Group #: ___ Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/>	[Other Specify] #: __ Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No
Data collection tool(s)	X	Structured (Quantitative)	X	Semi-structured (Qualitative)

¹ Longitudinal analysis is only possible and will only be reported upon if the geographic coverage remains the consistent over time, i.e. data is being compared from the same H2R wards month to month.

	Sampling method		Data collection method			
Structured data collection tool # 1 <i>Select sampling and data collection method and specify target # interviews</i>	X Purposive		X Key informant interview (KII) (Target #): varies by LGA, aiming to cover at least 5% of settlements per month			
Semi-structured data collection tool (s) # 1 <i>Multi-Sectoral Service Access Gap FGD</i>	X Purposive		X Focus group discussion (Target #): minimum of 3 FGD per LGA per month, to be led by saturation. KIs who are newly arrived internally displaced persons (IDPs) who have left a hard-to-reach settlement in the last 3 months			
Semi-structured data collection tool (s) # 2 Participatory Mapping FGD	X Purposive		X Focus group discussion (Target #): minimum of 3 FGD per LGA per month, to be led by saturation. KIs who are newly arrived internally displaced persons (IDPs) who have left a hard-to-reach settlement in the last 3 months			
Target level of precision if probability sampling	N/A		N/A			
Data management platform(s)	X	IMPACT	<input type="checkbox"/>	UNHCR		
	<input type="checkbox"/>	[Other, Specify]				
Expected output type(s)	X	Situation overview #: bi-monthly	<input type="checkbox"/>	Report #: __	<input type="checkbox"/>	Profile #: __
	<input type="checkbox"/>	Presentation (Preliminary findings) #: __	<input type="checkbox"/>	Presentation (Final) #: __	X	Factsheet #: 7 sectors monthly
	<input type="checkbox"/>	Interactive dashboard #: __	<input type="checkbox"/>	Webmap #: __	X	Map #: as needed
	<input type="checkbox"/>	[Other, Specify] #: __				
Access	X	Public (available on REACH resource centre and other humanitarian platforms)				
	X	Restricted (bilateral dissemination only upon agreed dissemination list, no publication on REACH or other platforms) Sensitive data will be shared via UN OCHA and ISWG on a need to know basis; all other data is publicly available.				
Visibility <i>Specify which logos should be on outputs</i>	All product should be REACH branded, with visible OFDA and ECHO logos included, where other partners support or fund data collection, their logos should be included or references provided on each document.					

2. Rationale

2.1. Rationale

The continuation of conflict in Northeast Nigeria has created a complex humanitarian crisis, rendering sections of Borno state as hard to reach. UN OCHA estimates that 820,000 individuals remain isolated in areas inaccessible to the humanitarian response and with limited access to basic services such as health care and education. Specific conditions and needs of the population in hard to reach (H2R) settlements remain unknown, and population figures, as well as demographic composition and status (non-displaced, IDP, returnee), are formulated with little actual knowledge of the situation. The purpose of the H2R assessment is to address information gaps facing the humanitarian response in Northeast Nigeria and inform humanitarian actors on the demographics of individuals in hard-to-reach areas of Northeast Nigeria, as well as to identify their needs, access to services and movement intentions.

3. Methodology

2.1. Methodology overview

Key Informant Interviews (KII) will be conducted in accessible locations, with Key Informants (KI) who are either IDPs arriving from the H2R areas within the last three months or those who have had contact with someone living in the H2R area in the last one month. Similarly, FGDs on service access and participatory mapping will be conducted in accessible locations, with KIs who are IDPs arriving from the H2R areas within the last three months. All KIs will be purposively sampled. Quantitative data will be aggregated to the settlement level and analysed at the LGA level, and findings will only be reported if at least 5% of settlements in an LGA were assessed. FGD data will be analysed to provide further explanation of the results from the quantitative data. The data from the KIIs and FGDs is indicative of broad trends only, not statistically generalizable.

2.2. Population of interest

In recognition of the lack of information on populations remaining in H2R areas, this assessment focuses on IDP and host community populations in H2R or inaccessible areas in Borno State. For the purpose of this assessment, H2R areas are defined as those areas of the state that are not regularly accessible to international humanitarian actors. Data is collected at the lowest possible administrative unit – individual settlements – as derived from the most recent version of the Vaccination Tracking System (VTS) dataset (released in February 2019 on vts.eocng.org). The level of coverage (proportion of settlements assessed in a given LGA²) will be declared for each product when results are presented. LGA-level reporting in which less than 5% of settlements have been assessed will be not be included in published REACH products.

2.3. Secondary data review.

Secondary data will be used throughout all stages of the research cycle to identify locations most in need of data collection, to support in the design of tools and to triangulate data produced:

- Selecting geographic coverage: Areas **without** secondary data will be targeted for H2R data collection, especially when this is a result of limited humanitarian access. Through discussions with humanitarian partners, existing analysis processes (HNO and the ISWG) hard-to-reach areas will be identified and targeted in data collection.
- Triangulation of H2R data in analysis and product drafting: To triangulate information produced through H2R data produced by UN OCHA, WFP and specific clusters, when available and appropriate, will be used to verify and confirm findings.

2.4. Primary Data Collection

Quantitative data collection tools

Quantitative data is collected, currently, in six LGA capitals: Bama, Dikwa, Gowza, Maiduguri, Monguno, and Ngala. Pending access, the data collection teams may expand to other accessible areas in the future. Data is collected through a

² In the future, the project may move to reporting on the level of coverage at the ward level.

structured multi-sector survey tool that captures settlement-level information on displacement, FSL, WASH, Shelter, Nutrition, Protection, Education, and Health.

The tool is available in English, Hausa, and Kanuri, with translations provided by Translators Without Borders. Data is collected on mobile phones through Kobo Toolbox. At the end of each data collection day, the forms are uploaded to the Kobo server, after which the datasets are merged, cleaned and uploaded to the REACH/IMPACT server on a daily basis. Data is collected by enumerators who are supervised by Field Officers who in turn are managed by a Field Manager and Assessment Officer. Before the start of data collection each morning, enumerators are briefed by Field Officers based on the data cleaning process of the previous day (described in the next section) to ensure appropriate coverage, debrief on any potential data collection errors and to achieve the highest quality in data collection.

Qualitative data collection tools

In order to provide a more in-depth understanding of the dynamic context as well as to complement data collected through the quantitative tool, the monthly data collection cycle also entails FGDs. FGDs are conducted by Field Officers, with Enumerators translating when necessary. FGDs are separated by gender and age when there are enough participants.

- *Displacement mapping tool*: A participatory mapping tool for use within FGDs to capture displacement flows and push and pull factors to secure locations and from H2R areas. This is conducted each month to provide an analysis of displacement trends per geographical area. FGD participants are purposively sampled new arrivals (IDPs who arrived within the last three months).
- *Service access gap tool*: The service access gap FGD tool is used to capture the level of access to sectoral services (FS, ERL, Health, Nutrition, Shelter & NFI, WASH, Education and Protection) and service access constraints. In the majority of cases this tool is used to look at wider settlement-level service access trends, with participants purposively selected according to their origin in a specific ward. Participants are purposively sampled new arrivals (IDPs who arrived within the last three months).
- *Monthly module*: A short module may also be introduced in addition to the service mapping gap tool, that will vary in theme depending on the findings from the previous months' H2R data collection, the interests of sectors and humanitarian partners, the needs of the displaced populations and/or the status of the response. For example, modules may inquire about recipients experience in receiving humanitarian aid services, or may query their intentions to return to their place of origin.

Given the dynamic and fast-moving nature of the Nigeria crisis, data collection is occurring for areas that are inaccessible. This restricts the sampling methods to:

1. KIs who are newly arrived internally displaced persons (IDPs) who have left a hard-to-reach settlement in the last 3 months.
2. KIs who have had contact with someone living in the H2R area in the last one month. (traders, migrants, family members, etc.)

Due to this sampling approach and the Hard-to-Reach methodology in general, data is only indicative and not representative.

Where possible, only KIs that have arrived very recently (0-3 weeks prior to data collection) will be interviewed.

KIs report on the settlement level. A minimum of one KI per settlement is required, and teams will seek to avoid more than 5 KIs per settlement in order to avoid inefficiencies.

For focus group discussions (FGDs) a purposive approach will also be employed. Field Officers will seek out people with knowledge of the ward in question.

2.5. Data Processing & Analysis

Every day, at the end of data collection, the surveys are uploaded on the REACH/IMPACT Kobo-server and downloaded in csv format as one dataset for a specific site. This dataset is cleaned during the evening, logging deleted entries and value changes, whilst the raw dataset is also stored. Given more than one quantitative survey may be collected on a given settlement, data from key informants reporting on the same settlement is aggregated to the settlement level using a R script. To reconcile divergent responses when responses are aggregated to the level of the settlement, the most common response provided by the greatest number of KIs is reported for that settlement. Questions in which the KIs from the same hard-to-reach settlement did not provide a most-common, or consensus response, are reported as “no consensus”. Data is analysed by the Assessment Officer feeding the R script output on Excel and/or Tableau. The FGDs notes are typed and sent to the Field Manager to be stored in a clearly labelled folder. An Assessment Officer analyses the FGDs to identify trends and themes at the LGA level. As both KI and FGD participants may have left the settlement anytime in a 3 month time period, the results may be indicative of the situation in the H2R area at different periods of time.

3. Roles and responsibilities

Table 2: Description of roles and responsibilities

<i>Task Description</i>	<i>Responsible</i>	<i>Accountable</i>	<i>Consulted</i>	<i>Informed</i>
<i>Research design</i>	Assessment Officer (AO)	Country Coordinator (CC)	GIS Team, Geneva Research Unit (GRU), Global Data Analysis Specialist	Sectors, UN OCHA, relevant partners
<i>Supervising data collection</i>	Field Manager (FM)	AO	GIS Team	Clusters, UN OCHA, relevant partners
<i>Data processing (checking, cleaning)</i>	Data Base Assistant	Senior Database Officer	GIS Team, Assessment Office	AO, FM
<i>Data analysis</i>	AO, GIS Team	GIS Team head	GIS Team, GRU	CC
<i>Mapping</i>	GIS Team	GIS Team head	GRU	CC
<i>Output production</i>	AO	GIS Team head	GIS Team, CC, GRU	
<i>Factsheets</i>	GIS Team	AO	GRU, CC, GIS Team head	
<i>Situation Overview</i>	AO	GIS Team head	GISO, CC, GRU	
<i>Dissemination</i>	AO	CC	Geneva	
<i>Monitoring & Evaluation</i>	AO, GIS Team	CC	Geneva	
<i>Lessons learned</i>	AO, GIS Team	CC	Geneva	

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

4. Data Analysis Plan

RESEARCH QUESTIONS ADDRESSED WITH SEMI-STRUCTURED TOOL(S)

Research Questions	SUBQ#	Sub-research Question	Questionnaire QUESTION	Probes	Data collection method	Key disaggregations
N/A	A.1.1	Facilitator name	Facilitator name	N/A	FGD	
	A.1.2	Note taker name	Note taker name	N/A	FGD	
	A.1.3	Settlement and Ward name	Which settlement and ward do the participants have knowledge of?	N/A	FGD	
	A.1.4	LGA and origin the H2R area is in.	Which LGA and state is the HARD TO REACH area in?	N/A	FGD	
	A.1.5	How do they know about this settlement? (Recently left and when, HH member visited, Regular contact etc.)	How do they know about this settlement? (Recently left and when, HH member visited, Regular contact etc.)	N/A	FGD	
	A.1.6	Participants age	Please circle your age range.	N/A	FGD	
What are the dynamics and patterns of displacement from an identified area of interest?	B.1.1	What were the push factors for displacement?	Of those who left the [HARD TO REACH] area in the last three months, why did MOST of them choose to leave?		FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
	B.1.2	What are the demographics of the remaining population different than the original population?	How is the remaining population in the [HARD TO REACH] area different from the original population, before the conflict?		FGD	ward of interest gender (depending on group composition) age group (depending on group composition)

B.1.3	What are the pull factors to various locations?	Of those who left the [HARD TO REACH] area in the last three months, did everyone go to the same location? If not, please identify the other directions people fled to? [identify on the map]	Why did people go to these different locations?	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.4	Why do people go to a particular location first?	Where did most people from the [HARD TO REACH] area go to originally? [identify on the map]	Why did they go to this location? How long did they stay there? What routes did people take to get there?	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.5	How are people completing their journeys?	Did people go to one location and stay there or were their multiple phases of their journey?	[if so ask them about this and identify on the map]	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.6	What transportation did people use?	How did they travel (on foot, car, bicycle, other)? How much did it cost?	[Note if the cost is per person or another unit]	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.7	What are the challenges people face on the routes?	Were there any challenges on these routes?	If so, what were the challenges? o Where did they occur?	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)

B.1.8	What are the pull factors to this location?	Why did people come to/stay in this particular location?	Were there other locations they could have gone to? If so, why did they choose to come here? Are people free to move to another location now, if they wanted to? If not, why not?	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.9	What are people's future intentions, in relation to their displaced location?	Do people intend to stay here in this location?	If so, why? If not, where do they plan to go? Is this a temporary move or permanent move? Why?	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.10	What are people's future intentions, in relation to the HARD TO REACH area?	Do you personally expect to visit (temporarily or permanently) the [HARD TO REACH] area again?	If so, why?	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.11	What pull or push factors would led to people returning to the HARD TO REACH areas?	Under what conditions would you or others decide to go with their families permanently back to the [HARD TO REACH] settlement?		FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
B.1.12	What are the future intentions of people still in the HARD TO REACH area?	Do people in [HARD TO REACH] intend to stay in that location?	If so, why? If not, where do they plan to go?	FGD	ward of interest gender (depending on group composition) age group (depending on group composition)

	B.1.13	Are people free to move?	If they want to, are they free to move to a new location?		FGD	ward of interest gender (depending on group composition) age group (depending on group composition)
Why does some of the population remain in the settlement?	C.1.1	Why do some people remain in the settlement?	Of those who remain in the [HARD TO REACH] settlement, why are they remaining?		FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
	C.1.2	Are the people remaining in the settlement from more vulnerable population groups?	What kinds of people mostly remain in the settlement? Why is it that those kinds of people mostly remain?	(examples: gender, age, social status, livelihood, religion, others?)	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
What are the priority needs of the remaining population?	C.1.3	What are the priority needs of the remaining population?	Among those who are still in the [HARD TO REACH] settlement, what are the top three priority needs for most people now?	How would you rank these needs? Why are these the highest priority?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
How accessible is the HARD TO REACH area?	C.1.4	Is the HARD TO REACH area receiving outside information?	What kind of information are you getting now from the [HARD TO REACH] settlement if any?	How are you getting this information? Do you trust this information? If not, why not?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

	C.1.5	Can humanitarians or the government access the HARD TO REACH area?	In the month before you left, were the populations in [HARD TO REACH] settlement accessible to humanitarian service providers or government / other communities?	Why were they accessible or why were they not accessible?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
What is the access to food and livelihoods?	C.1.6	What are the main sources of food?	In the month before you left, what was the most usual source of food for MOST people in [HARD TO REACH] settlement?	Has the most usual source of food changed in the last 3 months? If so, when did it change? Why did it change?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

C.1.7	Can people access sufficient food?	In the month before you left, was there sufficient access to food in the [HARD TO REACH] area?	If not, why not? If not, in the month before you left, what did people do when there was not enough food? DO NOT SUGGEST ANY SPECIFIC COPING STRATEGIES. Ask probing questions relating to each of the coping strategies they mention: Is this something people would normally do before the conflict? How often did people use these coping strategies?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
C.1.8	Can people access a market?	In the month before you left, was there a functioning market in the area?	If there was one, was the market different than it was before the conflict? How? If there was not one, why not?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
C.1.9	What livelihoods are people performing?	In the month before you left, what types of livelihoods activities were people in [HARD TO REACH AREA] performing?	What barriers, if any, exist to them performing these livelihood activities? Were people performing other livelihood activities before the conflict? If so, which ones? Why has it changed?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

	C.1.10	Are communities farming in the same way they normally would?	Have farming practices changed since before the conflict?	If so, how? Why?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
	C.1.11	Has something caused farming practices to change recently?	Did farming practices change in the last three months before you left the [HARD TO REACH] settlement?	If so, how? Why?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
What are the protection needs of the remaining population?	C.1.12	Do people feel safe?	In the month before you left, did most people feel safe most of the time in the [HARD TO REACH] settlement?	If so, why? If not, why not?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
	C.1.13	What are the main protection concerns?	In the month before you left, what were the protection concerns that effected the most people in the [HARD TO REACH] settlement?	How did the protection concerns vary by gender, age, or for other groups of the population (examples of other groups: wealth, religion, tribe, disability status, IDPs, returnees)? Did the protection concerns change in the three months before you left the [HARD TO REACH] area?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

	C.1.14	Are there unaccompanied children?	In the month before you left, were there children living without a caretaker or relative looking after them in the [HARD TO REACH] settlement?	If so, why were they without a caretaker or relative?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
	C.1.15	Have people been separated from close relatives?	Are you currently separated from close relatives (inner family, like parents, siblings, spouse, children or people whom you used to live with before displacement) who are still in [HARD TO REACH AREA]?	If yes, when did the separation occur? If yes, what caused the separation? If yes, are you currently in contact with those from whom you are separated? What method do you use to stay in contact? How frequently are you in contact?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
What are the health needs of the population?	C.1.16	Are health services available?	In the month before you left, to what extent was there access to health care in the [HARD TO REACH] settlement?	If there was some access, what kinds of staff were available and what services did they offer? If no access, why not? If no access, how did people cope with the lack of services? How did these coping strategies vary by gender, age, or other characteristics?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

	C.1.17	What is the main cause of death?	In the month before you left, were people dying in the settlement?	If yes, what were the most frequent causes of death? Did the cause of death vary with different population groups (age, gender, IDPs, etc.)?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
What is the access to WASH services?	C.1.18	Do people have access to clean water?	In the month before you left, was there clean/safe drinking water in the [HARD TO REACH] settlement?	If no, why was there not a clean/safe water source?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
	C.1.19	Are people using latrines?	In the month before you left, to what extent did people use latrines regularly in [HARD TO REACH] settlement?	Why or why not?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
	C.1.20	Are people using soap?	In the month before you left, were people in [HARD TO REACH] settlement using soap?	If so, how did they get the soap? If the use of soap has changed, why has it changed?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

What is the access to education services?	C.1.21	Is education accessible?	In the month before you left, what kind of, if any, education services (formal or informal) were available in the [HARD TO REACH] settlement?	If no, what were the main barriers to accessing education? Explain why for each barrier. Was attendance different for boys and girls? If so, why? Did access to education services (formal or informal) change in the last 3 months before you left the [HARD TO REACH] settlement?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
	C.1.22	Have perceptions towards education change?	Have community perceptions towards education changed since the beginning of the conflict?	If yes, how? Why?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
What are the shelter needs?	C.1.23	What is the state of access to shelter?	In the month before you left, was anyone sleeping in the open, without a shelter in the [HARD TO REACH] area?	If yes, why? What groups of people were without shelter? (examples: host community, IDPs, returnees, women, men, children, elderly, etc.)	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

C.1.24	Have the main types of shelters changed?	Are the types of shelters people are using in the [HARD TO REACH] settlement different than they were before the conflict?	If so, why? If some shelters were destroyed in the conflict, have any shelters been rebuilt? If yes, by who? If not, why not?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)
C.1.25	Do population groups have different access to shelters?	Did the main shelter type vary for host community, IDPs, returnees, or other groups within the [HARD TO REACH] population?	If so, how did it vary? Why?	FDG	ward of interest gender (depending on group composition) age group (depending on group composition)

RESEARCH QUESTIONS ADDRESSED WITH STRUCTURED TOOL(S)

Research questions	IN #	Data collection method	Indicator group / sector	Indicator / Variable	Questionnaire Question	Questionnaire Responses	Data collection level
					The beginning of most questions will depend on the KI's response to question A.1.9. If they select that they have direct knowledge, questions will begin "In the month before you left" (as shown in the table below). If they select that they have indirect knowledge, questions will begin "In the last month".		
N/A	A.1.1.	KI Interview	Key characteristics	Enumerator base	Please specify your (enumerator) base:	List of active bases	N/A
	A.1.2.	KI Interview	Key characteristics	Enumerator number	Please specify your (enumerator) ID number:	Number choices 1-30	N/A
	A.1.3.	KI Interview	Key characteristics	KI Gender	Please indicate the gender of your key informant.	male; female	Individual
	A.1.4.	KI Interview	Key characteristics	KI Age	What is your (key informant) age?	18-25; 26-35; 36-45;46-55; 56-65;66+	Individual
	A.1.5.	KI Interview	Key characteristics	H2R state	What state is the hard to reach area in?	Borno; Adamawa; Yobe; Other	N/A
	A.1.6.	KI Interview	Key characteristics	H2R LGA	What LGA is the hard to reach area in?	list of all LGAs in selected state	N/A

	A.1.7.	KI Interview	Key characteristics	H2R ward	What ward is the hard to reach area in?	list of all wards in selected LGA	N/A
	A.1.8.	KI Interview	Key characteristics	H2R settlement	What is the name of the settlement?	list of all settlements in selected ward	N/A
	A.1.9.	KI Interview	Key characteristics	Type of contact	How did you get knowledge about $\{\text{info_settlement_final}\}$?	I was living in the settlement myself; I talked with someone who is currently living in the settlement or had been to the settlement	Individual
	A.1.10	KI Interview	Key characteristics	remote contact-confirm timeframe	To confirm, you have talked with someone living in $\{\text{info_settlement_final}\}$ or someone who visited $\{\text{info_settlement_final}\}$ IN THE LAST ONE MONTH?	Yes; No	Individual
	A.1.11	KI Interview	Key characteristics	remote contact-method	What is the MAIN method you used to contact someone living in $\{\text{info_settlement_final}\}$?	through talking with friends and family in person; through talking with friends and family on a mobile phone; through talking with transporter / taxi drive; through talking with traders; other; no response or I don't want to answer; I don't know	Individual
	A.1.12	KI Interview	Key characteristics	direct contact-confirm timeframe	To confirm, you have been to $\{\text{info_settlement_final}\}$ IN THE LAST THREE MONTHS?	Yes; No	Individual
	A.1.13	KI Interview	Key characteristics	direct contact-timing	When was the last time you were in $\{\text{info_settlement_final}\}$?	one month ago; two months ago; three months ago	Individual
	What are the demographics and vulnerabilities of the populations remaining in the H2R areas?	A.2.1	KI Interview	Demographics	% of (de)populated settlements	In the month before you left, were ANY members of the ORIGINAL POPULATION, i.e. those who have not been displaced, still living in the settlement?	Yes; No; No response or don't want to answer; I don't know

A.2.2	KI Interview	Demographics	% of settlements per proportion of remaining population	In the month before you left, what proportion of the ORIGINAL population, ie those who have not been displaced, remain in the settlement?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know	Settlement
A.2.3	KI Interview	Demographics	% of settlements with traditional community leaders	In the month before you left, were ANY traditional community leaders present in the settlement? (committees, village leaders, etc)	Yes; No; No response or don't want to answer; I don't know	Settlement
A.2.4	KI Interview	Demographics	% of settlements with IDPs	In the month before you left, were ANY IDPs living in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.2.5	KI Interview	Demographics	% of settlements per given proportion of IDP population	In the month before you left, what proportion of the total population of the settlement were IDPs?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know	Settlement
A.2.6	KI Interview	Demographics	% of settlements per IDP date of most recent arrival	When did the MOST RECENT IDPs arrive in the settlement?	Less than 1 month ago; 1-3 months ago; 4-6 months ago; 7-12 months ago; More than 1 year ago; No response or I don't	Settlement

					want to answer; I don't know	
A.2.7	KI Interview	Demographics	% of settlements with IDPs	Do you know where the MOST RECENT IDPs came from in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.2.8	KI Interview	Demographics	% of settlements per main state of present IDP's displacement	What state were the MOST RECENT IDPs from?	Borno; Adamawa; Yobe; Other	Settlement
A.2.9	KI Interview	Demographics	% of settlements per main LGA of present IDP's displacement	What LGA were the MOST RECENT IDPs from?	list of all LGAs from selected state	Settlement
A.2.10	KI Interview	Demographics	% of settlements with abductees	In the month before you left, was anyone living in the settlement an abductee?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.2.11	KI Interview	Demographics	% of settlements per given proportion of abductees	In the month before you left, what proportion of people living in the settlement were abductees?	Less than half (few or some); Around half; More than half (most or almost all); All; No response or I don't want to answer; I don't know	Settlement
A.2.12	KI Interview	Demographics	% of settlements with abductees	Do you know where the MOST abductees came from in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.2.13	KI Interview	Demographics	% of settlements per main state of abductee origin	What state were MOST abductees from?	Borno; Adamawa; Yobe; Other	Settlement
A.2.14	KI Interview	Demographics	% of settlements per main LGA of abductee origin	What LGA were MOST abductees from?	list of all LGAs from selected state	Settlement
A.2.15	KI Interview	Demographics	% of settlements with returnees	Have ANY of the original population of the settlement returned to the settlement after being displaced in another area?	Yes; No; No response or don't want to answer; I don't know	Settlement

	A.2.16	KI Interview	Demographics	% of settlements per main returnee reason	In the month before you left, what was the MAIN reason the majority of people returned to the settlement?	Returning to get their family members and then leave again with their family; People returning temporarily to farm or harvest; People who were abducted but escaped and came home; People returning from IDP camps to stay permanently; Returning to visit their family members; Other; No response or I don't want to answer; I don't know	Settlement
	A.2.17	KI Interview	Demographics	% of settlements with children under 5	In the month before you left, were there ANY children under 5 living in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.2.18	KI Interview	Demographics	% of settlements with pregnant or lactating women	In the month before you left, were there ANY pregnant or lactating women in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.2.19	KI Interview	Demographics	% of settlements per main remaining reason	Why did MOST PEOPLE remaining in the settlement stay in the settlement when you left?	Did not want to leave family members behind; Afraid of traveling; Did not have enough money to leave; Too weak, sick, or old to leave; Other; No response or I don't want to answer; I don't know	Settlement
What are the food security and livelihoods needs of populations remaining in H2R areas?	A.3.1	KI Interview	Food security and livelihoods	% of settlements per hunger level	In the month before you left, how bad was hunger for MOST people because they were not able to access enough food in the settlement?	Almost no hunger; Hunger is small, strategies are available to cope with the reduced access to food; Hunger is bad, limited options to cope with the reduced access to food; Hunger is the worst it can be, all over the settlement, and causing many	Settlement

						deaths; No response or I don't want to answer; I don't know	
A.3.2	KI Interview	Food security and livelihoods	% of settlements per main reason populations do not adequately access food	In the month before you left, what was the MAIN reason people couldn't access enough food in the settlement?		Natural causes (related to the weather, flooding, pests, or similar causes); Unsafe access to land; Crops have been stolen or destroyed; No functioning market or prices in market are too high; Other; No response or I don't want to answer; I don't know	Settlement
A.3.3	KI Interview	Food security and livelihoods	% of settlements per main types of food	In the month before you left, what types of food were REGULARLY eaten by MOST people in the settlement?		Cereals and roots (examples: sorghum, maize, millet, rice, bread, porridge, cassava); Beans, groundnuts, paste, other nuts; Fruit, cultivated and wild (examples: mangos, bananas, coconuts, palm fruit); Greens and vegetables; Meat and eggs; Milk and dairy (examples: milk, yogurt, cheese); No response or I don't want to answer; I don't know	Settlement

A.3.4	KI Interview	Food security and livelihoods	% of settlements per main source of food	In the month before you left, where did MOST people get their food from in the settlement?	Own production (cultivated); Own production (livestock); Foraged for wild foods; Hunting; Fishing; Bought with cash; Exchange goods for food; Given by family, friends, or other local people; Humanitarian assistance; Government food distribution; Other; No response or I don't want to answer; I don't know	Settlement
A.3.5	KI Interview	Food security and livelihoods	% of settlements per frequency of wild food consumption	In the month before you left, did MOST people eat wild plants that are not usually a part of their diet as part of a main meal?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.6	KI Interview	Food security and livelihoods	% of settlements per average number of meals	In the month before you left, how many meals did MOST people consume per day in the settlement?	Less than 1; 1; 2; 3; More than 3; No response or don't want to answer; I don't know	Settlement
A.3.7	KI Interview	Food security and livelihoods	% of settlements with access to food assistance, per type	In the month before you left, have ANY people received food distributed by an outside organization WITHIN the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.8	KI Interview	Food security and livelihoods	% of settlements with access to a functioning market	In the month before you left, were there ANY functional markets people could walk to FROM the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.9	KI Interview	Food security and livelihoods	% of settlements with guarded markets	Were any of those markets guarded by security forces?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.10	KI Interview	Food security and livelihoods	% of settlements with community member access	Are MOST community members in the settlement allowed to buy things at the markets?	Yes; No; No response or don't want to answer; I don't know	Settlement

A.3.11	KI Interview	Food security and livelihoods	% of settlements per type of impact of cereal prices on food access	In the month before you left, was there an increase in the price of CEREALS (sorghum, maize, millet, etc) available in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.12	KI Interview	Food security and livelihoods	% of settlements per food consumption coping strategy	In the month before you left, when there was not enough food in the settlement, what did ANY people do to cope with the lack of food? (read options out loud)	Not relevant, everyone always had enough food to eat in the last month; Rely on less preferred and less expensive food (i.e. cheaper, lower quality food); Borrow food from others; Eat wild foods that are not commonly part of their diet; Limit portion sizes at meal times; Adults do not eat so children can eat; Reduce number of meals eaten in a day; Skip entire days without eating; None, people did not change their behaviours; Other; No response or I don't want to answer; I don't know	Settlement

A.3.13	KI Interview	Food security and livelihoods	% of settlements per livelihood coping strategy	In the month before you left, when there was not enough food in the settlement, what did ANY people do to find new sources of food? (read options out loud)	Not relevant, everyone always had enough food to eat in the last month; Borrow food or money; Gather wild food; Consume seed stock meant for next season or harvest crops that are not yet ready; Send children to eat with neighbours; Sell home assets; Selling or slaughtering more livestock than normal for this time of year; More hunting than normal for this time of year; More fishing than normal for this time of year; Sending families out to displacement camps to receive food aid; None, people did not change their behaviours; Other; No response or I don't want to answer; I don't know	Settlement
A.3.14	KI Interview	Food security and livelihoods	% of settlements per livelihood activity	In the month before you left, which of the following activities did ANY people in the settlement engage in? (read options out loud)	Subsistence Farming; Farming to sell; Livestock; Hunting; Fishing; Casual labour; Market seller / shop keeper / trader; Transportation; Remittances (receiving money from relatives or friends outside of the settlement); Service (doctor, teacher, etc.); Other; No response or I don't want to answer; I don't know	Settlement

A.3.15	KI Interview	Food security and livelihoods	% of settlements per livelihood activity when there is no conflict	What are the livelihoods activities of ANY people who live in the settlement when there is NOT a conflict?	Subsistence Farming; Farming to sell; Livestock; Hunting; Fishing; Casual labour; Market seller / shop keeper / trader; Transportation; Earning salaries; Remittances (receiving money from relatives or friends outside of the settlement); Service (doctor, teacher, etc.); Other; No response or I don't want to answer; I don't know	Settlement
A.3.16	KI Interview	Food security and livelihoods	% of settlement with usual livelihood access	In the month before you left, did MOST people in the settlement have access to their usual livelihood activity?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.17	KI Interview	Food security and livelihoods	% of settlement per livelihood barrier	In the month before you left, for ANY people not accessing their usual livelihood activity, what could they not access?	Land for farming; Waterways for fishing; Land for animal grazing; Markets for buying materials or selling goods; Transportation; Seeds or livestock; They were not healthy enough; Other; No response or I don't want to answer; I don't know	Settlement
A.3.18	KI Interview	Food security and livelihoods	% of settlement per change in land access	In the month before you left, did MOST people have access to MORE land, LESS land, or the SAME amount of land for cultivation in the settlement, compared to the same time last year?	less land than this time last year; the same amount of land as this time last year; more land than this time last year; No response or I don't want to answer; I don't know	Settlement
A.3.19	KI Interview	Food security and livelihoods	% of settlements with sufficient access to seeds, tools, etc.	In the month before you left, did MOST people have sufficient access to ENOUGH seeds / tools / etc in the settlement to	Yes; No; No response or don't want to answer; I don't know	Settlement

				sustain their usual agricultural livelihoods?		
A.3.20	KI Interview	Food security and livelihoods	% of settlement harvesting in previous rainy season	Did ANY people in the settlement plant and harvest in the previous rainy season?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.21	KI Interview	Food security and livelihoods	% of settlement with access to livestock	In the month before you left, did ANY people own livestock in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.22	KI Interview	Food security and livelihoods	% of settlement with most people who normally access livestock able to access livestock	In the month before you left, were MOST people from the settlement who normally access livestock able to access ANY livestock?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.23	KI Interview	Food security and livelihoods	% of settlement relying on own harvest	Do MOST people in the settlement rely on their own farming and harvest as their main source of food?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.24	KI Interview	Food security and livelihoods	% of settlement per other harvest use	For people in the settlement who do not harvest primarily to feed themselves, what is the MOST common use for their harvest?	Not relevant, everyone harvests primarily to feed themselves; To pay a landlord; To sell in the market; To pay authorities or others; Other; No response or I don't want to answer; I don't know	Settlement
A.3.25	KI Interview	Food security and livelihoods	% of settlement with enough fuel	In the month before you left, did MOST people have access to enough fuel for lighting and cooking in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.26	KI Interview	Food security and livelihoods	% of settlement with electricity access	In the month before you left, did ANY people in $\{info_settlement_final\}$ have electricity?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.3.27	KI Interview	Food security and livelihoods	% of settlement per proportion of people having electricity	In the month before you left, what proportion of people in $\{info_settlement_final\}$ had electricity?	Less than half (few or some); Around half; More than half (most or almost all); All; No response or I don't want to	Settlement

						answer; I don't know	
<p>What are the health needs of populations remaining in H2R areas?</p>	A.4.1	KI Interview	Health	% of settlements with access to health facilities	In the month before you left, in the settlement, were there ANY FUNCTIONAL health facilities (e.g. clinic, hospital) that people could walk to?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.4.2	KI Interview	Health	% of settlements per distance of health facility	In the month before you left, how long did it take for MOST people to access those functional health facilities by foot FROM the settlement?	Under 30 minutes; 30 minutes to less than 1 hour; One hour to less than half a day; Half a day; More than half a day; No response or don't want to answer; I don't know	Settlement
	A.4.3	KI Interview	Health	% of settlements per main barrier to health care services	In the month before you left, what was the MAIN barrier to accessing health care services FROM the settlement?	There were never health facilities nearby; There are no health care workers in the area; There is no medicine available; The area is too insecure; Facilities were destroyed by conflict; Facilities were destroyed by natural disaster (flood, fire, or other); Lack of cash to pay for transportation or for Health Care fees; Other; No response or I don't want to answer; I don't know	Settlement
	A.4.4	KI Interview	Health	% of settlements with nutrition programming	In the month before you left, were there ANY feeding programmes that provided Plumpy Sup, CSB++ or other nutrition items available in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement

A.4.5	KI Interview	Health	% of settlements per most common health problem	In the month before you left, what was the MOST COMMON health problem for people in the settlement?	No common health problems; Water borne diseases: Cholera, Diarrhoea, Typhoid; Malaria / Fever; Skin infections, chicken pox, measles; Lung diseases: Tuberculosis, cough, breathing problems; Malnutrition; Wounds from fighting or conflict; Heart Problems; Stomach Problems; Other; No response or I don't want to answer; I don't know	Settlement
A.4.6	KI Interview	Health	% of settlements with excess mortality in past month	In the month before you left, have MORE people died than in PREVIOUS months for any reason in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.4.7	KI Interview	Health	% of settlements per perceived main cause of increase in death in past month	In the month before you left, what was the MAIN cause of an increase in deaths for MOST people in the settlement?	Water borne diseases: Cholera, Diarrhoea, Typhoid; Malaria / Fever; Skin infections, chicken pox, measles; Lung diseases: Tuberculosis, cough, breathing problems; Malnutrition; Wounds from fighting or conflict; Heart Problems; Stomach Problems; Child Birth; Other; No response or I don't want to answer; I don't know	Settlement

	A.4.8	KI Interview	Health	% of settlements per perceived main cause of death for children in past month	In the month before you left, what was the MAIN cause of death for children (younger than 18) in the settlement?	Water borne diseases: Cholera, Diarrhoea, Typhoid; Malaria / Fever; Skin infections, chicken pox, measles; Lung diseases: Tuberculosis, cough, breathing problems; Malnutrition; Wounds from fighting or conflict; Heart Problems; Stomach Problems; Child Birth; Other; No response or I don't want to answer; I don't know	Settlement
	A.4.9	KI Interview	Health	% of settlements per perceived main cause of death for adults in past month	In the month before you left, what was the MAIN cause of death for adults in the settlement?	Water borne diseases: Cholera, Diarrhoea, Typhoid; Malaria / Fever; Skin infections, chicken pox, measles; Lung diseases: Tuberculosis, cough, breathing problems; Malnutrition; Wounds from fighting or conflict; Heart Problems; Stomach Problems; Child Birth; Other; No response or I don't want to answer; I don't know	Settlement

	A.4.10	KI Interview	Health	% of settlements per perceived main cause of death for elderly in past month	In the month before you left, what was the MAIN cause of death for elderly in the settlement?	Water borne diseases: Cholera, Diarrhoea, Typhoid; Malaria / Fever; Skin infections, chicken pox, measles; Lung diseases: Tuberculosis, cough, breathing problems; Malnutrition; Wounds from fighting or conflict; Heart Problems; Stomach Problems; Other; No response or I don't want to answer; I don't know	Settlement
	A.4.11	KI Interview	Health	% of settlements per last time polio vaccination teams visited	When was the last time that polio vaccination teams visited the settlement?	Less than 6 months ago; 6 months- 11 months ago; 1- 3 years ago; 4- 5 years ago; 6- 10 years ago; More than 10 years ago; No response or I don't want to answer; I don't know	Settlement
	A.4.12	KI Interview	Health	% of settlements with children with potential polio symptoms	During the past three years, has any child (younger than 18) in the settlement developed a weak or paralyzed limb that became permanent?	Yes; No; No response or don't want to answer; I don't know	Settlement
What are the protection needs of populations remaining in H2R areas?	A.5.1	KI Interview	Protection	% of settlement per safety changes	In the month before you left, for MOST people, has the safety in the settlement gotten worse, gotten better or stayed the same as the previous month?	Better; Worse; Stayed the same; No response or I don't want to answer; I don't know	Settlement
	A.5.2	KI Interview	Protection	% of settlements with conflict incident with casualties in last month	In the month before you left, has there been ANY incident of conflict which has killed a civilian in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement

A.5.3	KI Interview	Protection	% of settlements with incidents of looting occurred in last month	In the month before you left, has there been ANY incident of property looting (where most property, including their harvest, was stolen from one or more households) in the settlement ?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.5.4	KI Interview	Protection	% of settlements per main safety concern for women	In the month before you left, what was the MAIN safety concern for WOMEN 18 years or older in $\{info_settlement_final\}$?	Violence by AOG; Other conflict related violence; Tribe based violence; Sexual violence; Abduction; Forced recruitment; Looting/criminality; Family separation; Early/forced marriage; Domestic violence; Harassment to disclose information; No issue; Other; No response or I don't want to answer; I don't know	Settlement
A.5.5	KI Interview	Protection	% of settlements per main safety concern for men	In the month before you left, what was the MAIN safety concern for MEN 18 years or older in the settlement ?	Violence by AOG; Other conflict related violence; Tribe based violence; Sexual violence; Abduction; Forced recruitment; Looting/criminality; Family separation; Early/forced marriage; Domestic violence; Harassment to disclose information; No issue; Other; No response or I don't want to answer; I don't know	Settlement

A.5.6	KI Interview	Protection	% of settlements per main safety concern for girls	In the month before you left, what was the MAIN safety concern for GIRLS younger than 18 years in the settlement ?	Violence by AOG; Other conflict related violence; Tribe based violence; Sexual violence; Abduction; Forced recruitment; Looting/criminality; Family separation; Early/forced marriage; Domestic violence; Harassment to disclose information; No issue; Other; No response or I don't want to answer; I don't know	Settlement
A.5.7	KI Interview	Protection	% of settlements per main safety concern for boys	In the month before you left, what was the MAIN safety concern for BOYS younger than 18 years in the settlement ?	Violence by AOG; Other conflict related violence; Tribe based violence; Sexual violence; Abduction; Forced recruitment; Looting/criminality; Family separation; Early/forced marriage; Domestic violence; Harassment to disclose information; No issue; Other; No response or I don't want to answer; I don't know	Settlement
A.5.8	KI Interview	Protection	% of settlements with unaccompanied children living in settlement	In the month before you left, were there ANY children (younger than 18) with no caretaker or relative looking after them living in the settlement ?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.5.9	KI Interview	Protection	% of settlements per status of current relations between host and IDP communities	In the month before you left, how were relations between MOST IDPs and the local community in the settlement ?	Good, with no incidents of conflict or dispute within the last month; Neutral, with few incidents of conflict or dispute within the last month; Poor, with many incidents of conflict or dispute within the last	Settlement

						month; No response or I don't want to answer; I don't know	
A.5.10	KI Interview	Protection	% of settlements with violent disputes	In the month before you left, did ANY disputes in the settlement end in violence?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.5.11	KI Interview	Protection	% of settlements per cause of disputes between IDPs and other community members	In the month before you left, what were the cause of MOST disputes between IDPs and other communities that resulted in violence in the settlement?	Land dispute; Food access dispute; Livestock access dispute; Water access dispute; Family dispute; Other; No response or I don't want to answer; I don't know		Settlement
A.5.12	KI Interview	Protection	% of settlements allowed to use light sources	In the month before you left, were people allowed to use light sources at night outside the home in the settlement?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.5.13	KI Interview	Protection	% of settlements with women having to walk outside at night	In the month before you left, did MOST women have to walk outside the home at night in the settlement?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.5.14	KI Interview	Protection	% of settlements with girls abducted	In the month before you left, are you aware of ANY girls, 18 years and younger, being abducted FROM the settlement?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.5.15	KI Interview	Protection	% of settlements with boys abducted	In the month before you left, are you aware of ANY boys, 18 years and younger, being abducted FROM the settlement?	Yes; No; No response or don't want to answer; I don't know		Settlement

A.5.16	KI Interview	Protection	% of settlements with women abducted	In the month before you left, are you aware of ANY women, older than 18, being abducted FROM the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.5.17	KI Interview	Protection	% of settlements with men abducted	In the month before you left, are you aware of ANY men, older than 18, being abducted FROM the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.5.18	KI Interview	Protection	% of settlements per where safety concerns are greater	Are safety concerns greater inside the settlement or outside of the settlement?	Inside the settlement; Outside the settlement; Safety concerns are the same inside and outside of the settlement; No response or don't want to answer; I don't know	Settlement
A.5.19	KI Interview	Protection	% of settlements with men free to move	During the past month, were MEN free to move within the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.5.20	KI Interview	Protection	% of settlements with women free to move	During the past month, were WOMEN free to move within the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.5.21	KI Interview	Protection	% of settlements with forced labour	During the past month, was ANYONE within the settlement enslaved or forced to labour against their will?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.5.22	KI Interview	Protection	% of settlements with landmine/UXO related accidents	In the month before you left, were there any landmine/UXO related accidents in the settlement, including both accidents with civilians and livestock?	Yes; No; No response or don't want to answer; I don't know	Settlement

What are the shelter needs of populations remaining in H2R areas?	A.6.1	KI Interview	Shelter	% of settlements per main shelter type used by host communities	In the month before you left, WHAT was the MOST COMMON shelter type used by those who have never been displaced from the settlement?	Permanent structure (e.g. brick, metal roof); Emergency Tent, from aid donor; Makeshift shelter (plastic sheet and other materials); Abandoned building; Community building (church, mosque, school, hospital); No shelter (sleeping in the open); Other; No response or I don't want to answer; I don't know	Settlement
	A.6.2	KI Interview	Shelter	% of settlements per living location for host community	In the month before you left, WHERE were MOST of those who have never been displaced living in the settlement?	In their original home; Another home in the same settlement; Community buildings (church, mosque, school, hospital); Away from their homes in the bush / swamp / forest / hills; Other; No response or I don't want to answer; I don't know	Settlement
	A.6.3	KI Interview	Shelter	% of settlements per main shelter type used by returnees	In the month before you left, WHAT was the MOST COMMON shelter type used by those in the settlement who are originally from the settlement, were displaced and have now returned?	Permanent structure (e.g. brick, metal roof); Emergency Tent, from aid donor; Makeshift shelter (plastic sheet and other materials); Abandoned building; Community building (church, mosque, school, hospital); No shelter (sleeping in the open); Other; No response or I don't want to answer; I don't know	Settlement

A.6.4	KI Interview	Shelter	% of settlements per living location for returnees	In the month before you left, where were MOST people, who are originally from the settlement who had been displaced and have now returned, living within the settlement?	In their original home; Another home in the same settlement; Community buildings (church, mosque, school, hospital); Away from their homes in the bush / swamp / forest / hills; Other; No response or I don't want to answer; I don't know	Settlement
A.6.5	KI Interview	Shelter	% of settlements per main shelter type used by IDPs	In the month before you left, WHAT was the MAIN shelter type used by IDPs in the settlement?	Permanent structure (e.g. brick, metal roof); Emergency Tent, from aid donor; Makeshift shelter (plastic sheet and other materials); Abandoned building; Community building (church, mosque, school, hospital); No shelter (sleeping in the open); Other; No response or I don't want to answer; I don't know	Settlement
A.6.6	KI Interview	Shelter	% of settlements per living location for IDPs	In the month before you left, WHERE were MOST IDPs living?	With the host community (in the same area as the host community); Community buildings (church, mosque, school, hospital, abandoned structure); In the bush; Other; No response or I don't want to answer; I don't know	Settlement
A.6.7	KI Interview	Shelter	% of settlements where IDPs are living in the open without shelter	In the month before you left, were ANY IDPs living in the open without shelter in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement

A.6.8	KI Interview	Shelter	% of settlements per percent of IDPs living in the open without shelter	In the month before you left, what proportion of IDPs were living in the open without shelter in the settlement?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know	Settlement
A.6.9	KI Interview	Shelter	% of settlements per available shelter building materials	In the month before you left, what shelter building materials were accessible to MOST people in the settlement?	grass; mud; timber; rope; metal sheet/zinc/aluminium sheet; local pole; none; Other; No response or I don't want to answer; I don't know	Settlement
A.6.10	KI Interview	Shelter	8 % of settlements with shelter destruction	In the month before you left, were ANY shelters destroyed or partially destroyed because of conflict in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.6.11	KI Interview	Shelter	% of settlements per proportion of destroyed shelters	In the month before you left, what proportion of shelters were destroyed because of conflict in the settlement?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know	Settlement
A.6.12	KI Interview	Shelter	% of settlements where flooding has displaced people	In the month before you left, was there ANY flooding, which made people leave their home and sleep somewhere else, in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.6.13	KI Interview	Shelter	% settlements per most needed but not available NFI item	In the month before you left, what was the MAIN non-food-item needed but not available in the settlement?	blanket; sleeping mat; jerry can; cooking pot; mosquito net; bucket; soap; plastic sheet; rope; pole; clothes; other; none; No response or I don't want to answer; I don't know	Settlement
A.6.14	KI Interview	Shelter	% of settlement with NFI distribution in previous 3 months	In the last THREE months, has there been a distribution of non-food-items in the settlement from an aid organization or other outside group?	Yes; No; No response or don't want to answer; I don't know	Settlement

What are the WASH needs of populations remaining in H2R areas?	A.7.1	KI Interview	WASH	% of settlements with(out) boreholes	In the month before you left, were ANY functional boreholes present in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.7.2	KI Interview	WASH	% of settlements per type of main source of drinking water	In the month before you left, what was the MAIN source of drinking water (improved or unimproved) for people in the settlement?	Borehole; tap stand; protected well; unprotected well; water truck; swamp; pond/lake; river/stream; other; No response or I don't want to answer; I don't know	Settlement
	A.7.3	KI Interview	WASH	% of settlements per time to collect drinking water	In the month before you left, how long did it take MOST people to reach, access, and return from the main water source with water in the settlement?	Under 30 minutes; 30 minutes to less than 1 hour; One hour to less than half a day; Half a day; More than half a day; No response or don't want to answer; I don't know	Settlement
	A.7.4	KI Interview	WASH	% of settlements where animals share same source of drinking water as humans	In the month before you left, were ANY livestock or other animals drinking directly from the same main water source as people, or kept close to the same main water source?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.7.5	KI Interview	WASH	% of settlements unable to access preferred water point because of safety concerns	In the month before you left, has ANY person not been able to access their preferred water point because they feared for their safety in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.7.6	KI Interview	WASH	% of settlements per availability of water source in both wet and dry season	Is the preferred water source available in both wet and dry season in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.7.7	KI Interview	WASH	% of settlements where people are using latrines	In the month before you left, were ANY people using latrines in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement

	A.7.8	KI Interview	WASH	% of settlements per proportion of people using latrines	In the month before you left, what proportion of people were using latrines in the settlement?	Less than half (few or some); Around half; More than half (most or almost all); All; No response or I don't want to answer; I don't know	Settlement
	A.7.9	KI Interview	WASH	% of settlements per reason people not using latrines	In the month before you left, what was the MAIN reason people were not using latrines in the settlement?	none available; Not functional / not finished construction; Not enough / overcrowded; Too dirty / full; Cultural reasons; Not safe to walk to or use; Destroyed by conflict; Other; No response or I don't want to answer; I don't know	Settlement
	A.7.10	KI Interview	WASH	% of settlements per hand washing materials	In the month before you left, what were MOST people using to wash their hands in the settlement?	Soap (with water); Ash (with water)	Settlement
What are the education needs of populations remaining in H2R areas?	A.8.1	KI Interview	Education	% of settlements with access to education services	In the month before you left, in the settlement, were there ANY education services people could walk to?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.8.2	KI Interview	Education	% of settlements per main reason that education services unavailable	In the month before you left, what was the MAIN reason education services were not accessible FROM the settlement?	There were never education facilities near by; Education facilities destroyed by natural disaster (flooding, fire); Education facilities destroyed by conflict; Education facilities no longer allowed to operate There were never any teachers; Teachers have been displaced or stopped working; Security concerns for children while at school or traveling to school; Other; No response or I don't	Settlement

						want to answer; I don't know	
A.8.3	KI Interview	Education	% of settlements where girls are attending formal school	In the month before you left, were ANY 6-17 year old GIRLS attending formal schooling in the settlement?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.8.4	KI Interview	Education	% of settlements per proportion of girls attending formal school	In the month before you left, what proportion of 6-17 year old GIRLS were attending formal schooling in the settlement?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know		Settlement
A.8.5	KI Interview	Education	% of settlements where girls are attending informal school	In the month before you left, were ANY 6-17 year old GIRLS attending informal schooling in the settlement?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.8.6	KI Interview	Education	% of settlements per proportion of girls attending informal school	In the month before you left, what proportion of 6-17 year old GIRLS were attending informal schooling in the settlement?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know		Settlement

A.8.7	KI Interview	Education	% of settlements per main reason girls are not attending school	In the month before you left, what was the MAIN reason GIRLS were not attending school (either formal or informal) in the settlement?	They need to work outside the home (agriculture, labour); They need to work in the home; They are too hungry to attend school; Girls are not supposed to attend school; There are no school supplies (stationary, for example); Issues related to menstruation (lack of hygiene items and lack of WASH facilities at schools); Security concerns while at school or traveling to school; The facilities are too far away; Other; No response or I don't want to answer; I don't know	Settlement
A.8.8	KI Interview	Education	% of settlements where boys are attending formal school	In the month before you left, were ANY 6-17 year old boys attending formal schooling in $\{info_settlement_final\}$?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.8.9	KI Interview	Education	% of settlements per proportion of boys attending formal school	In the month before you left, what proportion of 6-17 year old boys were attending formal schooling in the settlement?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know	Settlement
A.8.10	KI Interview	Education	% of settlements where boys are attending informal school	In the month before you left, were ANY 6-17 year old boys attending informal schooling in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
A.8.11	KI Interview	Education	% of settlements per proportion of boys attending informal school	In the month before you left, what proportion of 6-17 year old boys were attending informal schooling in the settlement?	Less than half (few or some); Around half; More than half (most or almost all);All; No response or I don't want to answer; I don't know	Settlement

	A.8.12	KI Interview	Education	% of settlements per main reason boys are not attending school	In the month before you left, what was the MAIN reason BOYS were not attending school (either formal or informal) in the settlement?	They need to work outside the home (agriculture, labour); They need to work in the home; They are too hungry to attend school; There are no school supplies (stationary, for example); Security concerns while at school or traveling to school; The facilities are too far away; Other; No response or I don't want to answer; I don't know	Settlement
What are the communication needs of populations remaining in H2R areas?	A.9.1	KI Interview	Communication	% of settlements where radio ownership is allowed	Is radio ownership allowed in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.9.2	KI Interview	Communication	% of settlements where someone owned a functioning radio	Did anyone in the settlement own a functioning radio?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.9.3	KI Interview	Communication	% of settlements where cell phone ownership is allowed	Is cell phone ownership allowed in the settlement?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.9.4	KI Interview	Communication	% of settlements where someone owned a functioning cell phone	Did anyone in the settlement own a functioning cell phone?	Yes; No; No response or don't want to answer; I don't know	Settlement
	A.9.5	KI Interview	Communication	% of settlements per main source of information	In the month before you left, WHAT was the main source of information for MOST people in the settlement?	Radio station (all types); Conversations during commercial transport (Taxi, Kekenapep, Minibus, or others); In person conversation; None (Don't get any information); Other; No response or I don't want to	Settlement

						answer; I don't know	
A.9.6	KI Interview	Communication	% of settlements per main person source of information	In the month before you left, WHO provided the main source of news for MOST people in the settlement}?	AOG; Friend/family; Aid worker; Community leader, religious leader or chief; Community health worker; Local authority; Transport driver; Traders; None; Other; No response or I don't want to answer; I don't know		Settlement
A.9.9	KI Interview	Communication	% of settlements with cell phone coverage	In the month before you left, did ANY people in the settlement have cell phone coverage?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.9.10	KI Interview	Communication	% of settlements per trusted info means	What means of receiving information do MOST people in the settlement trust the most?	Phone call (Mobile phone); Text message (Mobile phone); Radio; In person / face-to-face; Posters; Other; None; No response or I don't want to answer; I don't know		Settlement
A.9.11	KI Interview	Communication	% of settlements that had difficulty accessing information on humanitarian assistance	In the month before you left, did MOST people in the settlement have difficulty accessing information they needed regarding available humanitarian assistance?	Yes; No; No response or don't want to answer; I don't know		Settlement
A.9.12	KI Interview	Communication	% of settlements per main reason people can not access information on humanitarian assistance	In the month before you left, what was the MAIN reason people in the settlement could not access information on available humanitarian assistance?	Lack of electricity; Lack of mobile networks; Information is in the wrong language; Information is written and people are unable to read; People do not have credit on their phones; The security situation		Settlement

						does not allow information to come through; Other; No response or I don't want to answer; I don't know	
	A.9.13	KI Interview	Communication	% of settlements per most useful type of information	In the month before you left, which of the following types of information would have been the MOST useful to MOST people in the settlement?	Information on how to access humanitarian assistance; Any kind of information on administrative procedures such as registrations; Information on movement restrictions; Information about their families in another location; Information about the areas, where they originally come from (for IDPs); Other; No response or I don't want to answer; I don't know	Settlement

5. Data Management Plan

Detailed Data Management Plan available upon request.

6. Monitoring & Evaluation Plan.

IMPACT Objective	External M&E Indicator	Internal M&E Indicator	Focal point	Tool	Will indicator be tracked?
Humanitarian stakeholders are accessing IMPACT products	Number of humanitarian organisations accessing IMPACT services/products Number of individuals accessing IMPACT services/products	# of downloads of x product from Resource Center	Country request to HQ	User_log	X Yes
		# of downloads of x product from Relief Web	Country request to HQ		X Yes
		# of downloads of x product from Country level platforms	Country team		<input type="checkbox"/> Yes
		# of page clicks on x product from REACH global newsletter	Country request to HQ		X Yes
		# of page clicks on x product from country newsletter, sendingBlue, bit.ly	Country team		X Yes
		# of visits to x webmap/x dashboard	Country request to HQ		X Yes
IMPACT activities contribute to better program implementation and coordination of the humanitarian response	Number of humanitarian organisations utilizing IMPACT services/products	# references in HPC documents (HNO, SRP, Flash appeals, Cluster/sector strategies)	Country team	Reference_log	Humanitarian Needs Overview Humanitarian Response Plan Sector Response Strategies
		# references in single agency documents			UNOCHA Country Strategy
Humanitarian stakeholders are using IMPACT products	Humanitarian actors use IMPACT evidence/products as a basis for decision making, aid planning and delivery	Perceived relevance of IMPACT country-programs	Country team	Usage_Feed back and Usage_Survey template	Survey monkey: As part of regular dissemination email, survey monkey sent every six months to assess usage of REACH products.

	Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by IMPACT products	Perceived usefulness and influence of IMPACT outputs			Qualitative feedback: Each REACH staff responsible for reporting back to communications manager each time agency requests REACH information or provides feedback on how REACH information has been used
		Recommendations to strengthen IMPACT programs			
		Perceived capacity of IMPACT staff			
		Perceived quality of outputs/programs			
		Recommendations to strengthen IMPACT programs			
Humanitarian stakeholders are engaged in IMPACT programs throughout the research cycle	Number and/or percentage of humanitarian organizations directly contributing to IMPACT programs (<i>providing resources, participating to presentations, etc.</i>)	# of organisations providing resources (i.e.staff, vehicles, meeting space, budget, etc.) for activity implementation	Country team	Engagement_log	x Yes
		# of organisations/clusters inputting in research design and joint analysis			x Yes
		# of organisations/clusters attending briefings on findings;			x Yes

ANNEX 1: REACH ACRONYMS

REACH Internal team:

AM- Assessment Manager
AO – Assessment Officer
CC – Country Coordinator
DBS – Database Specialist
FA – Field Assistant
FO – Field Officer
FM – Field Manager
GVA – Geneva (HQ)
GISO – GIS Officer
GISS – Geographical Information Systems (GIS) Specialist
SFO – Senior Field Officer
SGISO – Senior GIS Officer

Research terms:

FGD – Focus group discussion
FS - Factsheet
H2R – Hard to Reach
KI(I) – Key informant (interview)
NC – No consensus
SDR – Secondary data review
SO – Situation overview

Clusters/coordination bodies:

AWG – Access Working Group
CCCM – Camp Coordination and Camp Management
FS – Food security
ERL – Early recovery and livelihoods
IMWG – Information Management Working Group
ISWG – Intersector Working Group
WASH – Water, sanitation, and hygiene

Partners:

ICRC – International Committee of the Red Cross
IOM DTM – International Organization for Migration (IOM) Displacement Tracking Matrix
IOM ETT – IOM Emergency Tracking Tool
MSF – Médecins Sans Frontières
OHCT – Operational Humanitarian Country Team
UNOCHA – United Nations Office for the Coordination of Humanitarian Affairs
WFP – World Food Programme

Data:

ACLED – Armed Conflict Location and Event Data (project)
INSO – The International NGO Safety Organisation

Other:

LGA – Local Government Area
IDP – Internally displaced person(s)

ANNEX 2: STEPS TO DAILY DATA CLEANING PROCESS

Preparation steps:

- Open dataset and cleaning log
 - o Every entry to the cleaning log should have the old value, replace value, category of what has been changed, the UUID and the enumerator code, to track enumerator quality
- Sort dataset by start date
- Sort dataset by location

Cleaning process

Daily by Database Assistant (DBA)

Monthly by Database Officer (DBO)

- Check duration by difference between start and end time; and by calculating the difference between start time of one survey and start time of the subsequent survey, to check how long it took to do one survey. Using the device ID
 - o Surveys < 20mins are to be deleted
 - o Surveys between 20min and 30min are to be flagged
 - o Surveys with negative values or with less than 3mins have been edited later and are to be flagged but not deleted
- Vertical check, to check for suspicious answer patterns per enumerator ID
- Check for the “Other” questions
 - o Check if the “other” is a relevant answer to the question
 - o Check if the “other” value falls into an existing category
 - o Check for suspicious answer patterns, including enumerators choosing the same answer for a question more often than would be expected.
- Horizontal check – check for logical sequence of answers (no contradictions)
 - o Example: selecting there is not enough food and then selecting that most people eat three meals a day
- Check for blanks (skip logics), if they make sense or if multiple questions have been skipped.
 - o Example: if all of the responses which would lead to having less questions because of skip logic have been selected

Email with flagged issues to Field Manager and Assessment Officers (Head of data unit in cc)

- Email should contain:
 - o # of surveys retained for the day
 - o # of surveys deleted on that day + details per reason + enumerator IDs
 - o Issues identified during cleaning (“other” values, logical errors, etc.)
 - o LGA settlement % tracker
 - o List of settlements (LGA + Ward + settlement name_ that we have 4 or more interviews for
 - o Any other relevant observations

ANNEX 3: STEPS TO DATA ANALYSIS

1. Daily data cleaning
Responsible persons:
DBA to do the cleaning and sending the email.
FM to keep an overview on recurring issues.
Head of Data unit to crosscheck weekly.
 - a. *Using the data cleaning log*
 - b. *Keeping track of suspicious results per Enumerator*
 - c. *Check for minimum duration of surveys*
 - d. *Daily email to FM*
2. Download data from reach ODK server
Responsible persons:
DBO
3. Data cleaning of the entire period in question
Responsible persons:
DBA to do the cleaning
DBO to crosscheck
Head of Data unit 2nd crosscheck and validation
 - a. *Horizontal and vertical cleaning*
4. Run data cleaning script
Responsible persons:
DBO to run the script and check results
5. Run settlement aggregation script
Responsible persons:
DBO to run the script and check results
Head of Data unit to check results
6. Manual deletion of any settlements that do not meet the 5% threshold for the data collection period in question
Responsible persons:
DBO to do the deletion
7. Run the Ward & LGA aggregation script for analysis on higher admin levels
Responsible persons:
DBO to run the script and check results
Head of Data Unit to crosscheck and validate
DBO to send email with clean dataset, settlement aggregation and LGA aggregation to relevant people in HQ, with country coordinator, AOs and head of data unit in cc