

Research Terms of Reference

WASH Infrastructure Mapping

NGA2007

Borno State, Nigeria

November 2020

Version 1

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	WASH Sector						
Project Code	35ANW						
Overall Research Timeframe <i>(from research design to final outputs / M&E)</i>	09/2020 to 03/2021						
Research Timeframe	1. Start collect data: Dec 8, 2020			5. Preliminary presentation: March 13, 2021			
<i>Add planned deadlines (for first cycle if more than 1)</i>	2. Data collected: February 6, 2020			6. Outputs sent for validation: March 6, 2020			
	3. Data analysed: February 20, 2020			7. Outputs published: March 20, 2020			
	4. Data sent for validation: February 20, 2020			8. Final presentation: March 23, 2020			
Number of assessments	<input checked="" type="checkbox"/>	Single assessment (one cycle) <i>One mapping activity will be done for each of the selected places</i>					
	<input type="checkbox"/>	Multi assessment (more than one cycle)					
Humanitarian milestones <i>Specify what will the assessment inform and when e.g. The shelter</i>	Milestone			Deadline			
	<input checked="" type="checkbox"/>	Donor plan/strategy			March 20, 2021		
	<input type="checkbox"/>	Inter-cluster plan/strategy			_ / _ / _ _ _ _		
	<input checked="" type="checkbox"/>	Cluster plan/strategy			March 20, 2021		
	<input type="checkbox"/>	NGO platform plan/strategy			_ / _ / _ _ _ _		

<p><i>cluster will use this data to draft its Revised Flash Appeal;</i></p>	<input type="checkbox"/>	<p>Other (Specify):</p>	<p>__/__/____</p>	
<p>Audience Type & Dissemination <i>Specify who will the assessment inform and how you will disseminate to inform the audience</i></p>	<p>Audience type</p>		<p>Dissemination</p>	
	<p><input type="checkbox"/> Strategic <input checked="" type="checkbox"/> Programmatic <input checked="" type="checkbox"/> Operational <input type="checkbox"/> [Other, Specify]</p>		<p><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"/> Website Dissemination (Relief Web & REACH Resource Centre) <input type="checkbox"/> Presentation of findings (e.g. at HCT meeting; Cluster meeting) <input type="checkbox"/> [Other, Specify]</p>	
<p>Detailed dissemination plan required</p>	<input type="checkbox"/>	<p>Yes</p>	<input checked="" type="checkbox"/>	<p>No</p>
<p>General Objective</p>	<p>To support evidence- based WASH partner interventions in 2021 in Northeast Nigeria by mapping water and sanitation infrastructure facilities and providing information on the functionality and quality of these to the WASH partners.</p>			
<p>Specific Objective(s)</p>	<ol style="list-style-type: none"> 1. To provide up-to-date information on WASH infrastructure service provision in seven locations of Borno state in Northeast Nigeria, with a focus on water and sanitation facilities; and 2. To provide technical support to WASH Development partners and WASH sector partners so that they can gather, consolidate and produce actionable information from WASH data collected in Northeast Nigeria; 			
<p>Research Questions</p>	<ol style="list-style-type: none"> A. What is the status of key WASH infrastructure, such as boreholes and sanitation points, in selected locations of Northeast Nigeria? What are the ownership and maintenance structures in place for WASH infrastructure? B. How many water points and latrines are there by type, functionality, access and geographic location? 			
<p>Geographic Coverage</p>	<p>Within Borno state in Northeast Nigeria, covering the entire accessible region (including camps within select towns) in: Monguno town, Dikwa town, Gwoza town, Pulka town, and select camps in Maiduguri and Jere (Teachers Village, Muna Axis, and Bakasi camp).</p>			
<p>Secondary data sources</p>	<ul style="list-style-type: none"> • REACH WASH Infrastructure mapping (camp setting) • Action Against Hunger Water Point Data • Action Against Hunger Nigeria Water Point Mapping Dashboard 			

Population(s)	<input checked="" type="checkbox"/>	IDPs in camp	<input checked="" type="checkbox"/>	IDPs in informal sites
<i>Select all that apply</i>	<input checked="" type="checkbox"/>	IDPs in host communities	<input type="checkbox"/>	IDPs [Other, Specify]
	<input type="checkbox"/>	Refugees in camp	<input type="checkbox"/>	Refugees in informal sites
	<input type="checkbox"/>	Refugees in host communities	<input type="checkbox"/>	Refugees [Other, Specify]
	<input checked="" type="checkbox"/>	Host communities	<input type="checkbox"/>	[Other, Specify]
Stratification <i>Stratification refers to comparison between non-representative data for this assessment.</i>	<input checked="" type="checkbox"/>	Geographical #:5 ¹ ____ Population size per strata is known? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Group #: ____ Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No	[Other Specify] #: ____ Population size per strata is known? <input type="checkbox"/> Yes <input type="checkbox"/> No
Data collection tool(s)	<input checked="" type="checkbox"/>	Structured (Quantitative)	<input type="checkbox"/>	Semi-structured (Qualitative)
		Sampling method		Data collection method
Structured data collection tool # 1 <i>Select sampling and data collection method and specify target # interviews</i>	<input checked="" type="checkbox"/>	Purposive: Key Informants using or living near infrastructure points		<input checked="" type="checkbox"/> Direct observations (Target #):Target unknown as it will depend on how many water points/latrines exist in the 7 locations <input checked="" type="checkbox"/> Key Informant Interviews (Target #):Target unknown as it will depend on how many water points/latrines exist in the 7 locations <input checked="" type="checkbox"/> [Other, Specify] (Target #):mapping
Target level of precision if probability sampling		N/A		N/A
Data management platform(s)	<input checked="" type="checkbox"/>	IMPACT	<input type="checkbox"/>	UNHCR
	<input type="checkbox"/>	[Other, Specify]		
Expected output type(s)	<input type="checkbox"/>	Situation overview #: ____	<input type="checkbox"/>	Report #: ____
	<input type="checkbox"/>	Presentation (Preliminary findings) #: ____	<input checked="" type="checkbox"/>	Presentation (Final) #: 1
			<input type="checkbox"/>	Profile #: ____
			<input checked="" type="checkbox"/>	7

¹ Geographical coverage for this assessment is focused in Borno state, covering the entirety of 4 garrison towns, including camps within the named towns, and select camps in the Maiduguri/Jere Metropolitan region.

	<input type="checkbox"/>	Interactive dashboard #:_	x	Webmap #: 1_	x	Map #: _7
	x	[Other, Specify] #:dataset				
Access	x	Public (available on REACH resource center 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: ECHO					
	Coordination Framework: WASH sector logo					
	Partners: AAH, MC, SI, Nigeria Hydrological Services Agency					

2. Rationale

1. Rationale

Ten years into conflict, the dynamic and multi-faceted nature of the Northeast Nigerian crisis has created significant challenges for the delivery of humanitarian aid. Accessibility and security issues within Borno State have impeded a systematic understanding of WASH needs and existing infrastructure coverage in many areas of the country. This has created difficulties in establishing a clear and unambiguous system for prioritizing the delivery of aid, thereby limiting the effectiveness of humanitarian planning and limiting the potential impact of donor funding. As this crisis continues, and with plans for Internally Displaced Persons (IDP) to return to many settlements in the Northeast, it has become increasingly important to fill information gaps in a systematic and comprehensive manner to inform a more effective humanitarian response and planning for immediate life-saving WASH activities and contingency planning for durable solutions.

REACH, in close coordination with the Northeast Nigerian WASH sector, has identified a number of closely related needs that limit the reach, impact, and the effectiveness of WASH partner interventions and service delivery to beneficiaries. These gaps are as follows:

- Lack of a WASH Infrastructure database, indicating registration, functionality and maintenance of water points and latrines;
- Limited coordination and information sharing with local government actors,
- Limited assessment capacity by WASH Sector and local government actors

Through continued consultation with local government actors, development actors, WASH sector coordination, and wider humanitarian response coordination elements, REACH has concluded that the following elements will also be required to entrench best practices and ensure sustainability of the above activities:

- Capacity building efforts with the Borno State Rural Water and Sanitation Agency (RuWASA) to develop a WASH Infrastructure database.

In order to address the WASH-specific information gaps across Borno State in Northeast Nigeria, and after continued discussions with the WASH sector regarding solutions for such information gaps, it was proposed that REACH will support

through the creation of an infrastructure mapping pilot that could be used by partners in the target sites to assist in the harmonisation of WASH infrastructure assessments. REACH will assist through the primary data collection, as well as, through capacity building related to a WASH Infrastructure database. Through this infrastructure mapping pilot, these assessments will not only support WASH sector partners to respond effectively to the needs of the vulnerable populations but also aid RuWASA for long-term WASH Infrastructure management.

3. Methodology

1. Methodology overview

REACH will use quantitative mapping methodology, developed through close coordination between development donors and partners, and the WASH sector. Quantitative mapping will record what type of infrastructure exists (type of water point or latrine), who owns the infrastructure, whether it is free for users, how close it is to its users, and details on functionality. Enumerators will use smart phones to conduct primary data collection in the designated location, recording the location and condition of basic infrastructure of all water points and latrines in the area.

2. Population of interest

In this assessment, data will only be collected on infrastructure, rather than households of individuals, no personally identifiable information will be collected. Population of interest relates to populations utilizing infrastructure points and residing within Monguno town, Dikwa town, Gwoza town, Pulka town, and/or select camps (Muna Axis, Teachers Village, and Bakasi Camp) in Maiduguri and Jere, in Borno State, Northeast Nigeria. The entire accessible region within each site will be assessed, including camps in the selected towns. The sites were chosen in partnership with the WASH sector, as high priority sites for WASH programming.

3. Secondary data review

The relevant secondary data that is applicable to the WASH conditions in Borno State and may be used is available through the following resources.

- Water point location data provided by Action Against Hunger
- Action Against Hunger Nigeria Water Point Mapping Dashboard
 - [Dashboard](#)
- [REACH Nigeria 2017 WASH Baseline Assessment](#)
- [REACH Nigeria 2018 LGA Profiling Assessment](#)

4. Primary Data Collection

REACH, with feedback from the WASH sector and RuWASA, will develop a Kobo tool to survey water point and latrine facilities. The main tool that addresses the core indicators is found under Data Analysis Plan (Annex 1) below. This tool was created from the inputs provided by partner organizations Action Against Hunger, Mercy Corps, Solidarity International, and Nigeria Hydrological Services Agency.

In order to conduct a comprehensive infrastructure mapping of WASH facilities in Monguno, Dikwa, Gwoza, Pulka, and select camps in Maiduguri and Jere, a sweep of accessible towns in each selected local government area (LGA) will be done to account for each specified infrastructure type in the entire assessed area. The team will be led by the REACH sectoral GIS officer and senior assessment officer and data will be collected by 15 enumerators in total (each working a different number of days). In order to build the capacity of local staff and assist with the future transfer of tools to partners, REACH will work to include as many NGOs and INGO, government staff as well as UN staff in the training, data collection process and database creation.

Training and Pilot

Before data collection commences, REACH enumerators will receive a one-day training, in order to utilize time in the field effectively. Enumerators will be trained to use Maps.me and the Kobo tool. Once training is complete, the enumerators will be assigned a phone which contains Kobo collect and Maps.me to conduct a 2-day pilot test at Stadium Camp in Maiduguri. If enumerators experience issues or challenges using the tool, updates will be made prior to the start of data collection.

During the pilot test, two methods will be utilized to determine the most efficient and effective method to utilize for the duration of data collection. The pilot phase will include a gridded and un-gridded test, where half of the REACH enumerators will be assigned 250m² grids to assess interest points, and half will be assigned an un-gridded region to assess utilizing local neighborhood structures. All REACH enumerators will be accompanied by a local guide who is familiar with infrastructure in the region to ensure completeness. REACH enumerators assigned to use the grid method will be tasked to search the assigned grid to map latrines and water points within the area. Due to the highly dense sites, and limited experience by REACH enumerators utilizing grids on Maps.me, we will have a control group, who works utilizing local neighborhood boundaries alongside a local guide in lieu of standardized grids. Spatial checks will be performed to monitor coverage. The pilot phase will be used to assess the most effective methodology for the entirety of data collection given the context.

Direct Observation

Following training and the pilot, data collection will begin. Based on the pilot results, the most effective methodology, gridded or un-gridded, will be chosen to utilize throughout the data collection process. If the gridded methodology is chosen, a total of 813 grids will be distributed among a team of enumerators, the number of grids per enumerator will depend on the site. Enumerators will use Maps.me to navigate to their assigned grid, for places where no facility is reportedly present, enumerator will fill “empty place” inside the middle the grid. The steps below will be followed for effective data collection.

- Ensure a work plan distributing the coverage zones to be covered per enumerator by date.
- Have a memo on best practices to be followed which will be part of training manual that can be referred to whenever any clarification is needed. For example, security places shouldn't be mapped. These are sensitive areas that might get our staff into trouble.
- Local guide (camp liaison or other leader) will accompany enumerators throughout the target area to ensure data on all infrastructure points are collected/mapped. Local guides fees will be paid to accommodate for the lengthy time of data collection.
- Ensure daily logging of the challenges faced for future considerations and planning.
- Ensure production of a progress map showing the covered areas and those that are reported empty. Include these in the daily briefing, which should accompany actions points of the day based on lessons learned from previous day data collection.

Key Informant Interviews

After answering the direct observation questions regarding the infrastructure point, the REACH enumerator will be prompted to locate a Key Informant (KI) to answer additional questions on cost and usage of the specified infrastructure point.

KIs will be selected by the following procedures, in order of preference: 1) individual over 18 years using infrastructure point at time of collection; 2) if point is not in use, randomly select a KI by spinning a pen to point in the direction of a household to approach for the interview; the spin the pen method will be utilized to avoid selection bias. Gender and age of KIs will be recorded.

If the region being assessed is uninhabited or the REACH enumerator is unable to locate a KI given the above instructions, the local guide will answer the KI portion of the survey. If the KI does not know the answer to a question, the enumerator will select the 'Unable to confirm' option.

COVID-19 Precautions

Due to the rapid spread of COVID-19, the specific risk to already vulnerable communities, the importance of the humanitarian principle of “Do No Harm” as well as general considerations for “Duty of Care” (i.e. ensuring both field staff and local communities are not spreading and/ or exposed to the risk of contracting COVID-19 due to data collection

activities), IMPACT, with inputs and review support from WHO and Global Health Cluster colleagues, has developed Standard Operating Procedures (SOPs) to guide research teams on how to undertake data collection during the COVID-19 outbreak. The SOPs for data collection during COVID-19 will be followed to ensure of safety of participants and REACH staff.

All necessary protocols will be followed to ensure that REACH field staff and participants are protected from the threat of contracting COVID-19. These include:

- REACH enumerators, field officers, local guides, and key informants will maintain a distance of at least 2 meters from each other throughout the duration of the day's data collection, with as safe social distancing practices maintained.
- No objects will be passed from participants to participant, and direct contact between individuals will be prohibited.
- REACH field staff will wash their hands upon arriving at the data collection site for the day, and will wipe down phones and equipment utilized at the end of each day.
- REACH staff will be reminded of protocols and procedures each day before beginning data collection.

5. Data Processing & Analysis

Following each day of data collection, the Sectoral Field Officers will submit all collected forms to the REACH Sectoral Kobo server. The Sectoral GIS Officer will download the data and each form has been submitted nightly. Checks on these incoming results will be performed to minimize irregularities or errors and to ensure highest data quality possible. These checks and initial data cleaning take place after each day of data cleaning to avoid backlogging and delays in delivering final outputs. An automated script in R will export a .csv to map using Arcgis Pro and Arcgis Online. The final dataset will be reviewed by REACH HQ before publication and sharing.

Please see Annex 1 for a detailed Data Analysis Framework.

4. Roles and responsibilities

The REACH GIS Officer will coordinate closely with partners to define and draft methodology, tools, analysis techniques and the reporting framework. The REACH GIS Officer will design and execute capacity building workshops, as well as supervise and provide on-the-job training for the Borno State Rural Water Supply and Sanitation Agency (RuWASA) related to data management and WASH Infrastructure databases. Finally, the GIS Officer will draft and complete assessment reports and factsheets, validate, and uploaded reports and datasets, and assist with the dissemination of the findings.

The IMPACT country coordinator will provide oversight of assessment tools, methodology design and data collection activities. Furthermore, they will coordinate these activities with the sector partners to ensure the quality and timeliness of information products. The Sectoral Senior Assessment Officer, GIS Officer and Field Coordinator will work together to support this programme, as a part of their overall priorities. They will coordinate directly with partners but will remain under the direct supervision of the IMPACT Country Coordinators.

Table 2: Description of roles and responsibilities

Task Description	Responsible	Accountable	Consulted	Informed
<i>Developing tool, questionnaire, indicators, and ToR</i>	WASH GIS Officer	Sectoral SAO;	WASH Sector; IMPACT Research Design Unit	Country Coordinator, WASH development stakehold

				ers
<i>Supervising enumerators in the field</i>	WASH GIS Officer	Sectoral SAO	WASH Sector	WASH development stakeholders; Country Coordinator
<i>Daily cleaning and delivery of datasets</i>	WASH GIS Officer	Sectoral SAO	WASH Sector; IMPACT HQ Research Design Unit	WASH development stakeholders; Country Coordinator
<i>Finalising the outputs</i>	WASH GIS Officer	Sectoral SAO	WASH Sector; IMPACT HQ Reporting Unit	WASH development stakeholders; Country Coordinator
<i>Output dissemination</i>	WASH GIS Officer	Sectoral SAO	WASH Sector; IMPACT HQ Reporting Unit	WASH development stakeholders; Country Coordinator

Responsible: the person(s) who execute the task

Accountable: the person who validate 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

5. Data Analysis Plan

Research Question	Sector	Data Collection Method	Indicator	Questionnaire Question	Instructions	Choices	Data collection level	Maps planned
Location disaggregation	Metadata	Direct Observation	LGA of assessed infrastructure	Which LGA?	select one	List of LGAs	Settlement	yes

	Metadata	Direct Observation	Camp of assessed infrastructure	Are you in a camp?	select one	Yes, no	Settlement	yes
	Metadata	Direct Observation	Ward of assessed infrastructure	If so, which camp?	select one	List of camp names	Settlement	yes
	Metadata	Direct Observation	Settlement of assessed infrastructure	Which town?	select one	List of town names	Settlement	yes
		Direct Observation	Type of infrastructure point	What type of infrastructure point is this?	select one	Latrine Water Point	Settlement	yes
Water Point Portion								
Water Source	WASH	Direct Observation	% of water source type	[If water point, rows 7 - 24] What type of water source is this?	select one	Public tap/standpipe Hand pumps/boreholes Protected well Unprotected well Water seller/kiosks Piped connection to house (or neighbor's house) Rain water collection Bottled water, water sachets Tanker Truck Surface Water (lake, pond, dam, river) Other, specify NR Don't know	Settlement	no
What are the functionality/ management/ accessibility details for this specified water point?	WASH	Direct Observation	% of water point by origin source	Where does the water come from?	select one	Ground water River Ponds Rainwater Other (specify) I am unable to confirm	Settlement	no
	WASH	Direct Observation	% of operational water points	Is the water point functional?	select one	Fully operational, partially operational, not operational	Settlement	no
	WASH	Direct Observation	% of operational water point taps	[If 'partially functional'] How many taps in this tapstand are not functional or not usable?	select one	Integer	Settlement	no

WASH	Direct Observation	% of broken or damaged water points	Is the water point tap broken or damaged?	select one	Yes, there is damage No, there is no damage Some taps have damage	Settlement	no
WASH	Direct Observation	% of water points with leakage	Is there any visible leakage from the borehole?	select one	yes, no, unable to confirm	Settlement	no
WASH	Direct Observation	% of boreholes with drainage channel	Does the borehole/tapstand have a drainage channel?	select one	Both drainage and soak away pit Only drainage channel Only soak away pit No drainage channel or soak away pit I am unable to confirm	Settlement	no
WASH	Direct Observation	% of water points at risk of waste contamination	Is there any latrine within 15m from the water point?	select one	yes, no, unable to confirm	Settlement	no
WASH	Direct Observation	% of water points at risk of waste contamination	Are there any other source(s) of pollution (animal/human excreta, rubbish) within 15m from the water point?	select one	yes, no	Settlement	no
WASH	Direct Observation	% of inaccessible water points for PwD	Can a person with movement or sensory disabilities have access to the water point without difficulty?	select one	yes, no, unable to confirm	Settlement	no
WASH	Direct Observation	% of water point inaccessibility for PwD by barrier	[If no] What are the barriers to preventing them from accessing the borehole?	select multiple	Inaccessible entrance Entrance/platform too narrow No ramp available Too far to reach Other (specify)	Settlement	no
WASH	Key Informant	Key Informant Information	What is the gender of the key informant?	select one	Male, Female	Settlement	no
WASH	Key Informant	Key Informant Information	What is the age of the key informant?	select one	Between 18-25 Between 25-45 Between 45-65 Over 65 years old	Settlement	no
WASH	Key Informant	% of latrines by pump operating time in dry season	How many hours does the pump run per day during dry season?	select one	Less than 3 hours a day Between 3-5 hours a day Between 5-10 hours a day More than 10 hours a day I am unable to confirm	Settlement	no

	WASH	Key Informant	% of latrines by pump operating time in rainy season	How many hours does the pump run per day during rainy season?	select one	Less than 3 hours a day Between 3-5 hours a day Between 5-10 hours a day More than 10 hours a day I am unable to confirm	Settlement	no
	WASH	Key Informant	% of water points by ownership	Who owns this water point?	select one	Community Private owner NGO Government Institution (school, hospital, clinic) Formalized water provider Other (specify) I am unable to confirm	Settlement	no
	WASH	Key Informant	% of water points by management	Who is responsible for repairing this water point?	select one	Community Private owner Institution (school, hospital, clinic) Formalized water provider Government NGO Other (specify) I am unable to confirm	Settlement	no
	WASH	Key Informant	% of accessible water points	Can everyone access the water point?	select one	yes, no, unable to confirm	Settlement	no
	WASH	Key Informant	% of inaccessible water points by barrier	[if no] Why is it not accessible to everyone?	select multiple	Belongs to a private house Belongs to an institution (school, hospital, clinic, etc) Requires payment/membership Difficult to reach (elderly/persons with disabilities unable to reach) Fear of safety/insecurity (women/girls) Fear of safety/insecurity (men/boys) Unable to confirm Other (specify)	Settlement	no
	WASH	Key Informant	% of waterpoint by required payment	Do you pay to collect water at this site?	select one	yes, no, unable to confirm	Settlement	no

	WASH	Key Informant	% of waterpoints by payment type	In the last month, how did people pay for access to this water point?	select multiple	Per jerry can Per week Per month When it breaks down Don't pay I am unable to confirm	Settlement	no
	WASH	Key Informant	% of water points by reported cost	How much do you have to pay?	integer	Per jerry can Per week Per month When it breaks down	Settlement	no
Latrine Portion								
Type of Latrine	WASH	Direct Observation	% of latrine type	[latrine, rows 26 - 59] What type of latrine is this?	select one	Private latrine Communal latrine for public use Institutional latrine (in marketplace, school, hospital) for public use I am unable to confirm	Settlement	yes
	WASH	Direct Observation	% of latrine blocks	Is this a latrine block?	select one	yes, no, unable to confirm	Settlement	no
What are the functionality/ management/ accessibility details for this specified latrine/latrine block?	WASH	Direct Observation	% of latrines by size	How many latrines does this block have?	select one	1 latrine 2 latrines 3 latrines 4 latrines 5 latrines 6 latrines 7 latrines 8 latrines Other, specify	Settlement	yes
	WASH	Direct Observation	Enumerator check	How many showers are in this block?	select one	Integer		
	WASH	Direct Observation	% of operational latrine blocks	Is this latrine/latrine block functional?	select one	Fully operational, partially operational, not operational	Settlement	yes
	WASH	Direct Observation	% of nonfunctional latrines	[If 'partially functional'] How many latrines in this block are not functional or not usable?	select one	integer	Settlement	yes
	WASH	Direct Observation	% of latrines by sanitation facility type	What kind of sanitation facility is the latrine?	select one	Flush or pour-flush Pit latrine without slab/platform Pit latrine with slab and platform Pit VIP toilet	Settlement	no
	WASH	Direct Observation	% of latrine blocks with needed repairs	Does this latrine/latrine block have any damages or need repair?	select one	yes, no, unable to confirm	Settlement	yes

	WASH	Direct Observation	% of latrines with needed repairs	If yes, how many latrines in this block have damages or need repair?	select one	integer	Settlement	no
	WASH	Direct Observation	% of latrines labeled by gender	Are the gender markings to indicate if the latrine/latrine block is for men or women?	select one	yes, no, unable to confirm	Settlement	yes
	WASH	Direct Observation	% of latrines with privacy wall	Is there a privacy wall in front of the latrine/latrine block?	select one	yes, no, unable to confirm	Settlement	no
	WASH	Direct Observation	% of latrines with handwashing station	Is there a hand washing station at this latrine point?	select one	yes, no, unable to confirm	Settlement	no
	WASH	Direct Observation	% of latrines with functional handwashing station	Is the hand washing station functional (with water and soap or ash)?	select one	Yes (with water and soap) Yes (with water and ash) Yes (with water only) Yes (with soap only) Yes (with ash only) No I am unable to confirm	Settlement	no
		Direct Observation	% of latrines with roof	Does the latrine have a roof?	select one	yes, no, unable to confirm	Settlement	no
	WASH	Direct Observation	% of latrines by roof material	[If yes] What material is the roof of the latrine made out of?	select one	Iron sheet Grass Plastic Sheet No roof Other (specify)	Settlement	no
	WASH	Direct Observation	% of latrines with 4 walls	How many walls does the latrine have?	select one	None 1 2 3 4	Settlement	no
	WASH	Direct Observation	% of latrines by wall material	What material are the walls of the latrine made out of?	select one	Plastic Sheet Bricks/Concrete Grass or local materials Tin/other metal sheeting Material or curtain Other (specify)	Settlement	no
	WASH	Key Informant	Key Informant Information	What is the gender of the key informant?	select one	Male, Female	Settlement	no

WASH	Key Informant	Key Informant Information	What is the age of the key informant?	select one	Between 18-25 Between 25-45 Between 45-65 Over 65 years old	Settlement	no
WASH	Key Informant	% of latrines available by gender	Who can use this latrine/latrine block?	select one	Men only Men and women Women only I am unable to confirm	Settlement	yes
WASH	Key Informant	% of latrines by outside lighting	Is the inside of the latrine well lit?	select one	yes, no, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines by inside lighting	Is the outside of the latrine well lit?	select one	yes, no, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines by cleanliness	How clean are the latrines in this block?	select one	Clean (no trash, excreta, other materials on the floor, seat, or walls) Slightly clean (some trash, excreta, other materials on the floor, seat, or walls) Unclean (lots of trash, excreta, other materials on the floor, seat, or walls) I am unable to confirm	Settlement	no
WASH	Key Informant	% of latrines by fullness	How full are the latrines in this block?	select one	Full (100%) Almost full (75%) Less full (50% or less) I am unable to confirm	Settlement	no
WASH	Key Informant	% of latrines with door	Does the latrine/latrine block have doors?	select one	yes, no, only some, unable to confirm	Settlement	no
	Key Informant	% of latrines with functional door	Are the latrine/latrine block doors functional?	select one	yes, no, only some, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines with privacy door	When the door is closed, can you see inside the latrine?	select one	yes, no, in some, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines with locks	Are the latrines able to be locked from the inside?	select one	yes, no, in some, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines with hook	Is there a dull nail or place to hang cloth on the inside the latrine?	select one	yes, no, in some, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines with protected drainage channels	Is there a protected drainage channel within the latrine/latrine block?	select one	yes, no, in some, unable to confirm	Settlement	no
	Key Informant	% of latrines by damaged roof	[If yes to row 37] Is there a hole in the roof where you would be able to fit two hands through?	select one	yes, no, unable to confirm	Settlement	no

WASH	Key Informant	% of latrines by slab material	What material is the slab primarily made of?	select one	Concrete Iron Plastic Wood Dirt/sand Other, specify	Settlement	no
WASH	Key Informant	% of latrines with cracked slab	Is the slab damaged or cracked?	select one	yes, no, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines by floor material	What material is the floor of the latrine made out of?	select one	Plastic Concrete Wood Dirt I am unable to confirm	Settlement	no
WASH	Key Informant	% of latrines by required payment	Do you have to pay to use the latrine?	select one	yes, no, unable to confirm	Settlement	no
WASH	Key Informant	% of latrines by usage fee	How much do you have to pay?	integer	per use, day, month, to repair	Settlement	no
WASH	Key Informant	% of suppressant used	What suppressant is most commonly used after defecation at this latrine site?	select one	Dirt, Ash, None, Other (specify)	Settlement	no
WASH	Key Informant	% of accessible latrines	Can everyone access the latrine?	select one	yes, no, unable to confirm	Settlement	no
WASH	Key Informant	% of latrine inaccessible by reason	[If no] Why is it not accessible to everyone?	select one	Belongs to a private house Belongs to an institution (school, hospital, clinic, etc) Requires payment/membership Difficult to reach (elderly/persons with disabilities unable to reach) Fear of safety/insecurity (women/girls) Fear of safety/insecurity (men/boys) Unable to confirm Other (specify)	Settlement	no
WASH	Key Informant	% of latrines accessible for PwD	Can persons with disabilities (visual, hearing, physical, or mental impairments) gain access to the facility?	select one	yes, no, unable to confirm	Settlement	no

	WASH	Key Informant	% of latrines by barrier for PwD	[If no] What barriers are preventing them from accessing the facilities?	select multiple	No ramp available No railing inside the latrine No bench seat within the latrine Too narrow/small Inaccessible entrance Other (specify)	Settlement	no
	WASH	Key Informant	% of latrines by ownership type	Who owns this latrine point?	select one	Community Private owner Institution (school, hospital, clinic) Non-government organization Government Other (specify) I am unable to confirm	Settlement	no
	WASH	Key Informant	% of latrines by management	Who is responsible for repairing this latrine point?	select one	Community Private owner Institution (school, hospital, clinic) Non-government organization Government Other (specify) I am unable to confirm	Settlement	no

6. Monitoring & Evaluation Plan

IMPACT Objective	External M&E Indicator	Internal M&E Indicator	Methodology	Focal point	Tool	Research-specific information (to be filled by country team for each research cycle/ToR)
Humanitarian stakeholders are accessing project products	Number of humanitarian organisations accessing IMPACT services/products Number of individuals accessing IMPACT services/products	# of downloads of x product from Resource Centre	User monitoring	Country request to HQ	User_log	Y
		# of downloads of x product from Relief Web		Country request to HQ		Y
		# of downloads of x product from Country level platforms		Country team		Y
		# of page clicks on x product from REACH global newsletter		Country request to HQ		N
		# of page clicks on x product from country newsletter, sending Blue, bit.ly		Country team		Y
		# of visits to the web-based platform (once functional)		Platform management		N
Humanitarian	Humanitarian actors use project products as a	Perceived relevance of project programs			Usage_F	
		Perceived usefulness and influence of project outputs				

stakeholders are using project products	basis for decision making, aid planning and delivery Number of humanitarian documents (HNO, HRP, cluster/agency strategic plans, etc.) directly informed by project products	Recommendations to strengthen project programs	Usage M&E	Country team	eedback and Usage_Survey template	Usage survey to be conducted at the end of the the project in March 2021.
		Perceived capacity of REACH staff				
		Perceived quality of outputs/programs				
		Recommendations to strengthen project programs				
Humanitarian stakeholders are engaged throughout the research cycle	Number and/or percentage of humanitarian organizations directly contributing to project programs (providing resources, participating to presentations, etc.)	# of organisations/WASH sector partners providing resources (i.e. staff, vehicles, meeting space, budget, etc.) for activity implementation	Engagement Monitoring	Country team	Engagemen_t_log	Running log to be kept of all contributions, inputs and engagement
		# of organisations/WASH sector partners inputting in research design and joint analysis				
		# of organisations/sectors attending briefings on findings;				
		# of organisations/WASH sector partners attending trainings				