

# WASH BASELINE ASSESSMENT

## An evidence base for focused aid delivery

Borno state, Nigeria

October 2017



## SUMMARY

Since May 2013, the Boko Haram insurgency in northern Nigeria has resulted in destroyed infrastructure, provoked severe livelihoods erosion and triggered the displacement of over 2 million people, out of which 1.4 million people are in Borno state<sup>1</sup>. The humanitarian situation of internally displaced persons (IDPs), returnees and the non-displaced population in Borno state is concerning. Following years of conflict, the population is likely to remain displaced for the medium term, lacking security, shelter and livelihoods in their villages of origin. With a highly dynamic and difficult-to-access context, northern Nigeria remains a crisis with limited amount of evidence available to humanitarian partners for aid planning and delivery.

To fill in information gaps, **the Nigeria Water, Sanitation and Hygiene (WASH) sector and the Global WASH Cluster, with support from REACH, carried out a WASH assessment in Borno state to provide an evidence base for a needs-specific intervention.** The assessment took place in eight LGA capitals (Askira/Uba, Bayo, Biu, Chibok, Konduga, Kwaya Kusar, Mafa and Mobbar) and targeted the three main population groups (IDPs, returnees and non-displaced).

**A mixed-methods data collection driven by a household-level tool and Focus Group Discussions (FGDs) took place between 4 September 2017 and 17 October 2017.** Within each of the selected LGA capitals, data was collected through random sampling at a 95% confidence level and a 9% margin of error within the three populations groups. The IDP population sample was proportionally stratified by primary housing location types (formal camp, informal camp, IDPs living within host communities) to ensure findings are representative of the IDP population overall. **A total of 2,748 households were surveyed, along with 14 FGDs, across eight LGA capitals in Borno state.** As only LGA capitals were surveyed, this assessment does not account for urban / rural differences.

## KEY FINDINGS

**Overall, findings highlight statistically significant differences across population groups and across LGAs for most indicators.** For this reason, it is important to include all three population groups in future assessments, taking into consideration their specific needs and geographical location. In light of this assessment, **Mobbar in particular is of specific concern**, as households there reported the lowest perceived sufficiency of water, the lowest water consumption as measured in litres per person per day, the lowest proportion of households with access to functioning latrines and the highest proportion of households reporting visible wastewater in the vicinity.

## WATER

A majority of assessed households across population groups reported to use an improved water source as the main water source for drinking cooking and bathing in the 30 days prior to the assessment.<sup>2</sup>

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<sup>1</sup> 2017 Humanitarian Needs Overview Nigeria, page 4. Found at [https://reliefweb.int/sites/reliefweb.int/files/resources/ocha\\_nga\\_2017\\_hno\\_13012017.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/ocha_nga_2017_hno_13012017.pdf)

<sup>2</sup> Improved water sources are defined by WHO as sources that “adequately protect the water from outside contamination, in particular from faecal matter”. They include water piped into the dwelling or plot, public taps or standpipes, tube wells and boreholes, protected wells, protected springs and protected rainwater tanks. Found at [http://www.who.int/water\\_sanitation\\_health/monitoring/jmp2012/key\\_terms/en/](http://www.who.int/water_sanitation_health/monitoring/jmp2012/key_terms/en/)

**Internally Displaced Persons (IDPs) had better access to improved water sources when compared to returnees and non-displaced: 86% of IDP households reported using an improved water source as their main water source, compared to 62% of returnee households and 58% of non-displaced households.** Overall, tube wells and boreholes were the most commonly reported improved water source across all three population groups.

**Findings however varied widely across LGAs, with specific population groups in Askira/Uba (37% of non-displaced households and 31% of returnee households), Bayo (35% of non-displaced households) and Chibok (38% of non-displaced households) reporting the lowest access to improved water sources.** Unprotected wells and surface water were the most commonly reported unimproved water sources in LGAs reporting the lowest access to good water quality. These findings reinforce the need to guarantee access to improved water sources across LGAs and population groups.

**Despite overall better access to improved water sources by IDPs, access to an adequate water quantity was reported as more of an issue amongst this group in terms of litres per person per day consumed over the seven days prior to the assessment.<sup>3</sup> Twenty five percent (25%) of IDP households reported not having access to the minimum Sphere standard of 15 litres per person per day (l/p/d)<sup>4</sup>, followed by 22% of returnee households and 16% of non-displaced households. Households in Mobbar reported particularly low access: 46% of IDP households and 64% of returnee households reported not having access to a minimum of 15 l/p/d in the seven days prior to the assessment. Moreover, 13% of both IDP households and returnee households in Mobbar reported having a water consumption of under-5 l/p/d, compared to 2% of overall IDP and returnee households across assessed LGAs.**

**Access to a perceived sufficient quantity of water was overall lower than access to the minimum Sphere standard mentioned above, and showed little variation across population groups: 72% of IDP households, 68% of returnee households and 66% of non-displaced households reported having access to a sufficient quantity of water in the 30 days prior to the assessment to meet their household needs. Access to a sufficient quantity of water showed greater variation across LGAs; only 43% of IDP households and 24% of returnee households in Mobbar reported having sufficient water to cover basic needs in the 30 days prior to the assessment. Thus, households in Mobbar reported both the lowest perceived sufficiency of water and the lowest water consumption as measured in litres per person per day, which suggests that water quantity is of specific concern.**

Resource-based barriers were reported as the primary obstacle to ensuring access to at least 15 l/p/d. **A great majority of respondents** across all population groups (89% of non-displaced, 82% of IDPs and 78% of returnees) **attributed low water consumption to not having enough containers to store or carry water. The only exception to this trend was Mobbar, where respondents reported that the main reason for a low water consumption was due to not having enough water at their main water source.**

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<sup>3</sup> Water quantity was measured in both litres per person per day ("adequate quantity") and self-perceived sufficiency of water.

<sup>4</sup> According to The Sphere Project, 15 litres per person per day is the minimum quantity of water that a person needs for drinking, cooking and hygiene practices. See more at <http://www.spherehandbook.org/en/water-supply-standard-1-access-and-water-quantity/>

**Around a third of all population groups (37% of returnees, 34% of IDPs and 31% of non-displaced) reported both distance and queuing time as a problem when fetching water.** The return travel time taken to fetch water during peak times showed variation across LGAs. For instance, while 75% of IDP households in Bayo and 74% of IDP households in Mobbar reported to take 30 minutes or less to fetch water at their main water point, 24% of IDP households in Askira/Uba and 23% of IDP households in Chibok reported taking more than an hour.

**Half of all population groups (50% of IDPs, 43% of non-displaced and 58% of returnees) reported reducing water for hygiene practices (such as bathing less) as the main coping mechanism in households that reported not having sufficient water to meet needs.** Significant variations across LGAs showed 30% of returnee households and 26% of IDP households in Mobbar reporting to receive water on credit or to borrow water to meet water needs. Additionally, 41% of returnee households in Mobbar reported drinking water usually used for other purposes (such as cleaning).

## SANITATION

**A relatively low proportion of assessed households across all three population groups reported having access to a functioning latrine.** Twenty percent (20%) of IDP households, 10% of non-displaced households and 9% of returnee households reported not having access at all to a functioning latrine. Reported access to functioning latrines was lowest in Mobbar, Konduga and Mafa. The most common reported problems with latrines were a damaged structure (reported by 40% of IDP households) and unkept or unclean latrines (reported by 56% of non-displaced households and 30% of returnee households).

**Visible wastewater within the vicinity (30 metres or less) was reported by a relatively high proportion of households across all population groups.** Forty two percent (42%) of non-displaced households reported visible wastewater in the vicinity, followed by 38% of returnee households and 25% of IDP households. Significant variations across LGAs were observed, with 49% of non-displaced households in Askira/Uba and 48% of returnee households in Mobbar reporting visible wastewater in the vicinity, compared to only 18% of returnees in Mafa and 16% of IDPs in Konduga.

**A lack of adequate solid waste management infrastructure was highlighted by all population groups.** Only 19% of IDP households, 5% of returnee households and 2% of non-displaced households reported using a public collection system as the most common way for garbage disposal. **The most common method to dispose of garbage was to leave it uncollected in public areas,** as reported by 67% of returnee households, 63% of non-displaced households and 40% of IDP households. The second most common method was to bury or burn the garbage, as reported by 41% of IDP households, 35% of non-displaced households and 29% of returnee households.

Significant variations across LGAs show that 80% of IDP households in Kwaya Kusar reported leaving the garbage in public areas (against only 28% of IDP households in Konduga) and that 52% of non-displaced households in Chibok reported burying or burning the garbage (against only 11% of IDPs in Kwaya Kusar). A very small proportion of households across population groups and LGAs (under 10%) reported depositing the garbage in designated areas. The exception to this trend were IDPs in Konduga and Mafa and returnees in Mobbar.

## HYGIENE

**Proportions of households not owning soap varied widely across population groups, and was particularly problematic among IDP households.** More than half of all IDP households (54%) reported not owning soap, compared with 23% of non-displaced households and 11% of returnee households. Households in Konduga and Mafa reported significantly less soap ownership: 71% of IDP households in Konduga and 70% of IDP households in Mafa reported not owning soap.

Findings also highlighted the need to stress the importance of handwashing during critical times, particularly amongst IDPs. **Only 24% of IDPs, 42% of non-displaced and 49% of returnees were reportedly washing their hands before preparing food.** Also, **only 45% of IDPs reported washing their hands after defecating, compared with 63% of non-displaced and 66% of returnees.** A very low proportion of households across population groups reported both washing their hands before feeding a baby (23% of returnees, 18% of non-displaced and 12% of IDPs) and after disposing of a baby's faeces (18% of returnees, 13% of non-displaced and 8% of IDPs).

**Female FGD participants reported a strong preference for receiving reusable pieces of cloth or reusable sanitary pads for managing menstrual hygiene.** Participants also reported using ash to wash their reusable sanitary pads or cloths when no soap was available.

# CONTENTS

<b>SUMMARY</b> .....	<b>2</b>
<b>KEY FINDINGS</b> .....	<b>2</b>
Water .....	2
Sanitation.....	4
Hygiene .....	5
<b>CONTENTS</b> .....	<b>6</b>
<b>LIST OF ACRONYMS</b> .....	<b>7</b>
<b>GEOGRAPHICAL CLASSIFICATIONS</b> .....	<b>7</b>
<b>LIST OF TABLES</b> .....	<b>8</b>
<b>INTRODUCTION</b> .....	<b>10</b>
<b>METHODOLOGY</b> .....	<b>10</b>
<b>FINDINGS</b> .....	<b>15</b>
Water: Quality.....	15
Water: Quantity.....	19
Water: Main Barriers to Access .....	22
Water: Coping Strategies.....	23
Sanitation: Access to Latrines .....	26
Sanitation: Wastewater and Garbage Disposal .....	27
Hygiene: Soap .....	29
Hygiene: Handwashing at Critical Times and Hygiene Promotion .....	30
Hygiene: Menstrual Hygiene.....	33
<b>CONCLUSION</b> .....	<b>34</b>

## LIST OF ACRONYMS

<b>DTM</b>	Displacement Tracking Matrix
<b>FGD</b>	Focus Group Discussion
<b>GPS</b>	Global Positioning System
<b>GWC</b>	Global WASH Cluster
<b>HH</b>	Household
<b>IDP</b>	Internally Displaced Person
<b>IOM</b>	International Organization for Migration
<b>LGA</b>	Local Government Area
<b>l/p/d</b>	Litres per person per day
<b>NFI</b>	Non-Food Item
<b>NGO</b>	Non-Governmental Organisation
<b>ORS</b>	Oral Rehydration Salts
<b>UNICEF</b>	United Nations Children's Fund
<b>WASH</b>	Water, Sanitation and Hygiene
<b>WHO</b>	World Health Organization

## GEOGRAPHICAL CLASSIFICATIONS

<b>State</b>	Form of governance below the national level
<b>LGA</b>	Form of governance below the state level
<b>Ward</b>	Form of governance below the LGA level

## LIST OF MAPS

Map 1: Assessed LGA capitals in Borno state.....	13
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## LIST OF TABLES

Table 1: Areas assessed, by LGA and population group.....	12
Table 2: Population and total sample size, by LGA and population group.....	14
Table 3: Proportion of households reporting access to improved water sources, by population group..	15
Table 4: Proportion of households reporting access to improved water sources, by LGA and population group.....	16
Table 5: Proportion of households using an improved water source as the main water source for drinking, cooking and bathing in the 30 days prior to the assessment.....	17
Table 6: Proportion of households using an unimproved water source as the main water source for drinking, cooking and bathing in the 30 days prior to the assessment.....	18
Table 7: Proportion of households meeting Sphere standard (minimum 15L / person / day), by population group.....	19
Table 8: Proportion of households meeting Sphere standard (minimum 15L / person / day), by LGA and population group.....	20
Table 9: Proportion of households reporting having sufficient water to meet household needs in the 30 days prior to the assessment, by population group.....	20
Table 10: Proportion of households reporting having sufficient water to meet household needs in the 30 days prior to the assessment, by LGA and population group.....	21
Table 11: Reported amount of time required to collect water, by LGA and population group.....	22
Table 12: Proportion of households for whom fetching water constitutes a problem, by population group.....	23
Table 13: Main strategies to cope to cope with a lack of water, by population group.....	24
Table 14: Main coping mechanisms reported for those without sufficient access to water, by LGA and population group.....	25
Table 15: Proportion of households reporting access to functioning latrines, by LGA and population group.....	26
Table 16: Proportion of households reporting visible wastewater, by population group.....	27



Table 17: Proportion of households reporting visible wastewater, by LGA and population group.....27

Table 18: Proportion of households by garbage disposal method.....28

Table 19: Proportion of households reporting owning soap, by population group.....29

Table 20: Proportion of households reporting owning soap, by LGA and population group.....29

Table 21: Proportion of households reporting washing their hands at critical times, by LGA and population group.....32

## INTRODUCTION

Since May 2013, the Boko Haram insurgency in northern Nigeria has destroyed infrastructure, provoked severe livelihoods erosion and triggered the **displacement of over 2 million people**, out of which 1.4 million people are in Borno state<sup>5</sup>. **The humanitarian situation of internally displaced persons (IDPs), returnees and the non-displaced population in Borno state is concerning.** Following years of conflict, the population is likely to remain displaced for the medium term, lacking security, shelter and livelihoods in their villages of origin. With a highly dynamic and difficult-to-access context, **northern Nigeria remains a crisis with limited amount of evidence available to humanitarian partners for aid planning and delivery.**

To fill in information gaps, **the Nigeria Water, Sanitation and Hygiene (WASH) sector and the Global WASH Cluster, with support from REACH, carried out a WASH assessment in Borno state to provide an evidence base for a needs-specific intervention.**

The assessment took place **in eight LGA capitals (Askira/Uba, Bayo, Biu, Chibok, Konduga, Kwaya Kusar, Mafa and Mobbar) and targeted the three main population groups (IDPs, returnees and non-displaced).**

This report begins with a comprehensive description of the methodology used for this assessment, detailing the underlying rationale as well as the limitations. It then presents the key findings of the assessment divided into three main sections (Water, Sanitation and Hygiene) and subdivided into indicators on quality of water, water quantity, main barriers to water access and coping strategies, access to latrines, wastewater and garbage disposal, soap ownership, handwashing critical times and hygiene promotion messaging, and menstrual hygiene. The conclusion follows with a list of recommendations for WASH actors and partners.

## METHODOLOGY

### Research Objectives and Research Questions

The **general objective of the assessment** was to provide actionable information for immediate WASH partner interventions in Borno state.

The **specific objectives** were to:

- Provide a comprehensive/consolidated baseline for each of the WASH indicators identified during the June 2017 Global WASH Cluster mission
- Identify WASH-related vulnerabilities in both IDP and non-displaced populations
- Inform the update of the Nigeria WASH Sector Emergency Guidelines

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<sup>5</sup> 2017 Humanitarian Needs Overview Nigeria, page 4. Found at [https://reliefweb.int/sites/reliefweb.int/files/resources/ocha\\_nga\\_2017\\_hno\\_13012017.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/ocha_nga_2017_hno_13012017.pdf)

These objectives were accomplished through the following **research questions**:

- What, if any, challenges do IDP, returnee and non-displaced households face in terms of adequate access to water and how do they differ between populations, and where relevant, across LGAs?
- How do vulnerabilities related to adequate access to water differ between IDP, returnee and non-displaced households, and where relevant, across LGAs?
- How do vulnerabilities related to adequate access to water differ between IDP, returnee and non-displaced households, and where relevant, across LGAs?
- What hygiene conditions do IDP, returnee and non-displaced households experience and how do they differ between populations, and where relevant, across LGAs?

## Methodology Overview

The Nigeria WASH Sector and the Global WASH Cluster carried out a mixed-methods data collection driven by a household-level tool and Focus Group Discussions (FGDs). The methodology was developed in close coordination with REACH. Baseline WASH data was collected for all three main population groups (IDP, non-displaced and returnee)<sup>6</sup> across eight LGA capitals of Borno state. As only LGA capitals were surveyed, this assessment does not account for urban / rural differences.

REACH specifically targeted LGA capitals that:

1. were secure and accessible
2. lacked established local LGA-level coordination mechanisms
3. had limited existing information on WASH-related needs of conflict-affected populations, primarily due to access constraints

## Quantitative Data Collection

Primary quantitative data collection took place from 4 September to 1 October 2017. Sample sizes for each population group were determined based on the most current, reliable population information available at the start of data collection in each LGA gathered from the International Organization for Migration's Displacement Tracking Matrix (IOM DTM). Simple random sampling was conducted at household level, aiming for a confidence level of 95% with a 9% margin of error at population group level in each LGA. The exact geographic area of the assessment within each capital was based on security conditions at the start of the assessment.

Within each of the selected LGA capitals, REACH conducted random sampling at 95/9 for non-displaced and returnee population groups. Systematic random sampling was conducted at 95/9 within the IDP population group, with samples proportionally stratified by primary housing location types (formal camps, informal camps, within host community) to ensure findings are randomised and representative of the overall IDP populations in the eight LGA capitals assessed.

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<sup>6</sup> Not all population groups are present in every LGA (as illustrated in table 2). In such cases, only population groups that existed in the LGA were targeted.

1. Non-displaced persons (simple random)
2. Returnees (simple random)
3. IDPs (systematic random)
  - a. Residing in formal camps (proportional)
  - b. Residing in informal camps (proportional)
  - c. Living outside camps, amongst host communities (proportional)

Table 1. Areas assessed, by LGA and population group

In total, a sample of 2,748 households was interviewed (see below Tables 1 and 2) in the framework of this assessment.

Analysis of the IDP population group was weighted according to the total population sizes of IDPs residing in formal camps, informal camps and within host community, per assessed LGA capital. It was not possible to weight returnee and non-displaced results due to the lack of any accepted, reliable data set that provides accurate non-displaced and returnee population figures at the LGA capital or ward level.

### Qualitative Data Collection

The structured household-level data collection was followed by FGDs, meant to contextualise household-level data collection by providing a means to further investigate significant differences in responses, such as between different locations or population groups. The tool was designed at the midpoint of quantitative data collection based on analysis of data available at that point, in close coordination between the Global WASH Cluster, the Nigeria WASH Sector and REACH.

LGA	Non-displaced community and returnee areas assessed	IDP locations assessed
Askira/Uba	Askira/Uba (LGA capital)	Dille / Huyum (partial access)
		Lassa (partial access)
		Askira East
		Uba
		Zadawa / Hausari
Bayo	Bayo (LGA capital)	Lassa
		Fikayel
		Gamadadi
		Jara Dali
Biu	Biu (LGA capital)	Teli
		Wuyo
		Dugja
		Kenken
		Sulumthla
Chibok	Chibok (LGA capital)	Zarawuyaku
		Yawi
		Chibok Garu
		Chibok Likama
Konduga	Konduga (LGA capital)	Chibok Wuntaku (partial access)
		Pemi
		Konduga
Kwaya Kusar	Kwaya Kusar (LGA capital)	Dalori / Wanori (partial access)
		Auno / Chabbol (partial access)
		Kwaya Kusar
		Gondi
Mafa	Mafa (LGA Capital)	Guwal
		Wada
		Mafa
Mobbar	Mobbar (LGA capital)	Damasak

Primary qualitative data collection took place from 28 September to 17 October 2017 in three locations, Konduga, Mafa and Mobbar. The tool also included questions that were not initially part of the quantitative portion of the assessment, as some of the questions were targeted towards a specific gender or required a more comprehensive response.

FGDs were conducted with each of the three target population groups, IDPs, non-displaced and returnees, and further disaggregated by gender. Each FGD consisted of between six to eight participants, who were gathered based on their status and availability at the time of the assessment. A total of 14 FGDs were carried out.

## Challenges and Limitations

- Due to time and access constraints, **REACH was only able to target LGA capitals**. For this reason, **the data collected does not account for urban/rural differences**. Similarly, findings cannot be generalised to the entire LGAs, nor to the entirety of Borno state or northeast Nigeria.
- Furthermore, due to the lack of reliable population data for non-displaced population groups, results could not be aggregated per LGA.
- Another important challenge referred to **outdated population data**. In some LGAs population sizes were significantly different from best available information. Additionally, some of the GPS coordinates acquired through best available information were inaccurate. This affected sample size calculations and required recalculation using information obtained on the ground from community leaders.
- **In some findings below, percentages do not add up to 100% because respondents were able to choose multiple answers.**
- Findings are based on self-reported answers from households. For this reason, there is a risk of potential bias, particularly concerning sensitive topics.

Map 1. Assessed LGA capitals in Borno state

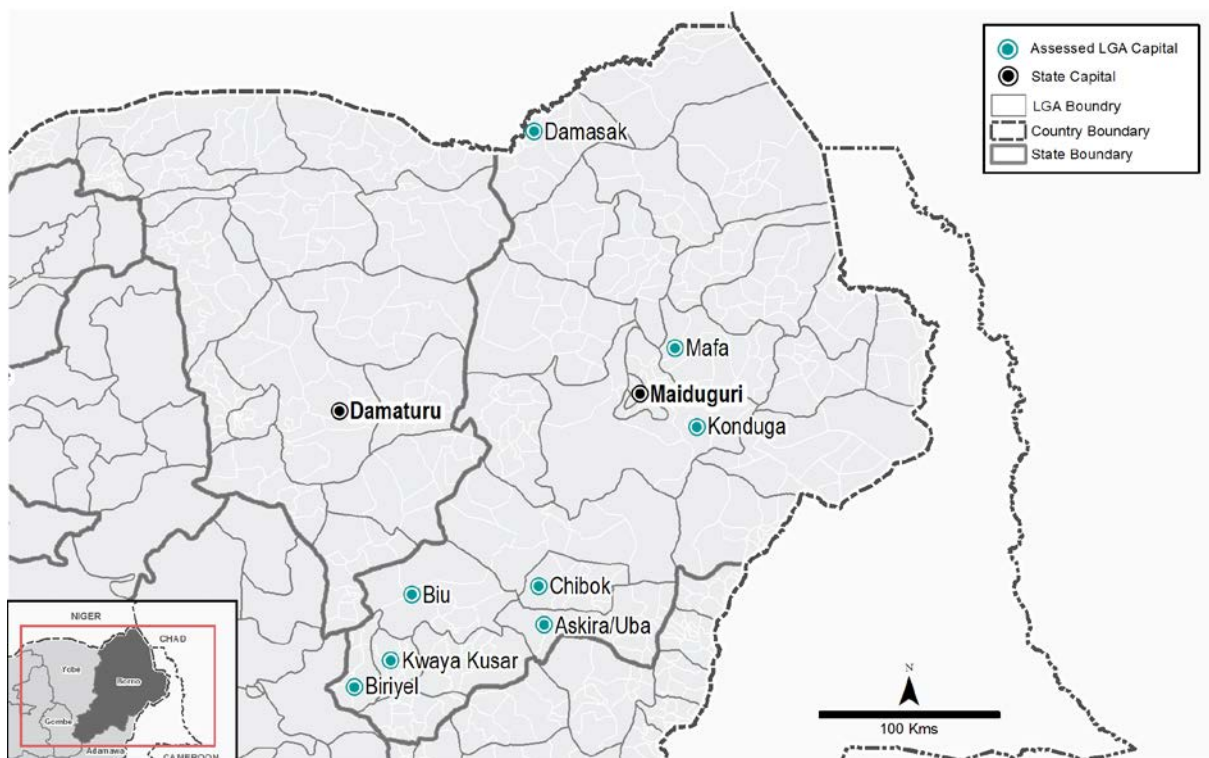


Table 2. Population and total sample size, by LGA and population group

LGA	Population group	Total number of HH	Total population	Confidence level/Margin of error	Sample per group <sup>7</sup>	Total sample
Askira/Uba	Non-displaced		*	95/9	129	338
	Returnee	20,587	164,696	95/9	132	
	IDP	914	5,484	95/9	77	
	Formal Camp	-	-	-	-	
	Informal Camp	671	4,026	-	-	
	Host Community	243	1,458	-	-	
Bayo	Non-displaced		*	95/9	138	299
	Returnee	445	2,771	95/9	109	
	IDP	70	560	95/9	52	
	Formal Camp	-	-	-	-	
	Informal Camp	-	-	-	-	
	Host Community	70	560	-	-	
Biu	Non-displaced		*	95/9	129	372
	Returnee	1,257	8,540	95/9	136	
	IDP	4,244	30,388	95/9	107	
	Formal Camp	-	-	-	-	
	Informal Camp	432	2,731	-	-	
	Host Community	3,812	27,657	-	-	
Chibok	Non-displaced		*	95/9	130	379
	Returnee	3,461	21,223	95/9	129	
	IDP	1,075	5,356	95/9	120	
	Formal Camp	53	275	-	-	
	Informal Camp	38	191	-	-	
	Host Community	984	4,890	-	-	
Kunduga	Non-displaced		*	95/9	122	384
	Returnee	3,461	21,223	95/9	126	
	IDP	15,758	86,858	95/9	136	
	Formal Camp	11,529	64,367	-	-	
	Informal Camp	2,666	14,207	-	-	
	Host Community	1,563	8,284	-	-	
Kwaya Kusar	Non-displaced		*	95/9	133	346
	Returnee	25,000*	*	95/9	130	
	IDP	173	989	95/9	83	
	Formal Camp	-	-	-	-	
	Informal Camp	-	-	-	-	
	Host Community	173	989	-	-	
Mafa	Non-displaced		*	95/9	142	385
	Returnee	4,023	8,612	95/9	122	
	IDP	1,739	6,772	95/9	121	
	Formal Camp	-	-	-	-	
	Informal Camp	1,419	6,093	-	-	
	Host Community	320	679	-	-	
Mobbar	Non-displaced		*	95/9	129	245
	Returnee	5,548	35,515	95/9	116	
	IDP	1,782	8,910	95/9	-	
	Formal Camp	-	-	-	-	
	Informal Camp	-	-	-	-	
	Host Community	1,782	8,910	-	-	
Total Sample						2,748

<sup>7</sup> In some cases, samples sizes vary between sampled groups because incorrect entries from the buffer were deleted due to data quality problems. However, this did not affect the confidence level and margin of error as the initial sampling frame had included a 10% buffer in case of data quality issues (extra surveys gathered).

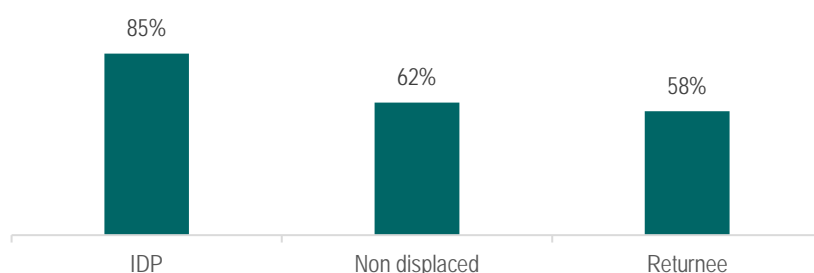
## FINDINGS

### WATER: QUALITY

Findings suggest profound differences in access to improved water sources across LGAs and population groups throughout Borno state<sup>8</sup>. In terms of access to improved water sources across population groups only **58% of returnee and 62% of non-displaced households used an improved water source as their main water source for drinking, cooking and bathing in the 30 days prior to the assessment.** This is in comparison to 85% of IDP households. Tube wells and boreholes were the most reported improved water sources across population groups, with 44% of IDP, 36% of non-displaced and 33% of returnee households citing them as their main source.

However, despite a greater proportion of IDP households reporting using an improved water source as their main water source, a number of contextual issues should be taken into consideration. For instance, many IDPs reported having to pay to power the generators with which water runs. Others reported having to leave camps to buy water or breaking curfew.

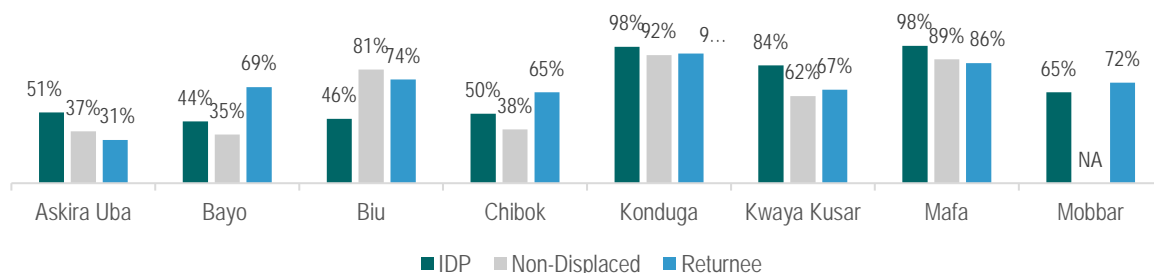
Table 3. Proportion of households reporting access to improved water sources, by population group



Households in Konduga and Mafa were more likely to report using an improved water source as their main source for drinking, cooking and bathing. In Konduga, 98% of IDP households, 93% of returnee households and 92% of non-displaced households used an improved water source and similarly in Mafa, 98% of IDP households, 89% of non-displaced households and 86% of returnee households reported the same. **Specific population groups in Askira/Uba, Bayo and Chibok reported the lowest access to improved water sources.** Only 31% of returnee households, 37% of non-displaced households and 51% of IDP households in Askira/Uba, 35% of non-displaced and 44% of IDPs in Bayo, and 38% of non-displaced and 50% of IDPs in Chibok reported access to an improved water source. It is important to highlight that a **significant proportion of households in Bayo (see Table 6) use surface water as their main water source for drinking, cooking and bathing.**

<sup>8</sup> Water sources were used as a proxy indicator for access to safe drinking water. Improved water sources, defined by the World Health Organization (WHO) as sources that “adequately protect the water from outside contamination, in particular from faecal matter”, include water piped into the dwelling or plot, public taps or standpipes, tube wells and boreholes, protected wells, protected springs and protected rainwater tanks. Unimproved water sources refer to unprotected dug well, unprotected spring, surface water (river, dam, lake, pond, canal, irrigation channel), bottled water and tanker truck water. Bottled water is considered unimproved due to limitations in quantity. For more information, see <http://www.who.int>

Table 4. Proportion of households reporting access to improved water sources, by LGA and population group



Challenges brought up during FGDs with non-displaced and returnee households included having only one or very few improved water points for the whole community; having improved water points located in “a deserted area vulnerable to attacks”; having to contribute money for the fuel to power generators used to run boreholes and other water sources; and returnees going to a nearby IDP camp to fetch water, where, reportedly, they were sometimes denied access by IDPs.

While most respondents reported not treating water after fetching it, some indicated using Aquatabs for water purification. However, most who did use them also reported having run out of the Aquatabs that had been distributed to them months back. Other participants pointed out that not all of them had received water purification tablets as those who had been assigned to distribute the water purification tabs had reportedly not distributed them equally among community members.



Table 5. Proportion of households using an improved water source as the main water source for drinking, cooking and bathing in the 30 days prior to the assessment

	Tube well/borehole	Public tap/standpipe	Protected well	Protected spring	Protected rainwater tank	Piped into the dwelling/plot	Total
<b>Askira/Uba</b>							
IDP	27%	0%	19%	5%	0%	0%	51%
Non-displaced	15%	4%	16%	1%	2%	0%	37%
Returnee	5%	2%	20%	5%	0%	0%	31%
<b>Bayo</b>							
IDP	19%	4%	13%	8%	0%	0%	44%
Non-displaced	21%	5%	7%	0%	0%	2%	35%
Returnee	26%	7%	28%	2%	1%	6%	69%
<b>Biu</b>							
IDP	11%	28%	6%	0%	0%	0%	46%
Non-displaced	47%	19%	14%	0%	0%	2%	81%
Returnee	32%	28%	12%	0%	1%	1%	74%
<b>Chibok</b>							
IDP	38%	7%	1%	3%	1%	0%	50%
Non-displaced	18%	4%	8%	8%	1%	0%	38%
Returnee	43%	10%	12%	0%	0%	0%	65%
<b>Konduga</b>							
IDP	47%	50%	1%	0%	0%	0%	98%
Non-displaced	55%	36%	1%	0%	0%	0%	92%
Returnee	68%	25%	0%	0%	0%	0%	93%
<b>Kwaya Kusar</b>							
IDP	42%	8%	33%	0%	1%	0%	84%
Non-displaced	36%	10%	14%	0%	1%	2%	62%
Returnee	44%	12%	8%	1%	2%	1%	67%
<b>Mafa</b>							
IDP	98%	0%	0%	0%	0%	0%	98%
Non-displaced	61%	22%	1%	0%	1%	5%	89%
Returnee	40%	45%	1%	0%	0%	0%	86%
<b>Mobbar</b>							
IDP	48%	3%	15%	0%	0%	0%	65%
Returnee	62%	4%	5%	2%	0%	0%	72%
<b>Total</b>	<b>38%</b>	<b>20%</b>	<b>8%</b>	<b>1%</b>	<b>1%</b>	<b>0%</b>	<b>68%</b>

Table 6. Proportion of households using an unimproved water source as the main water source for drinking, cooking and bathing in the 30 days prior to the assessment

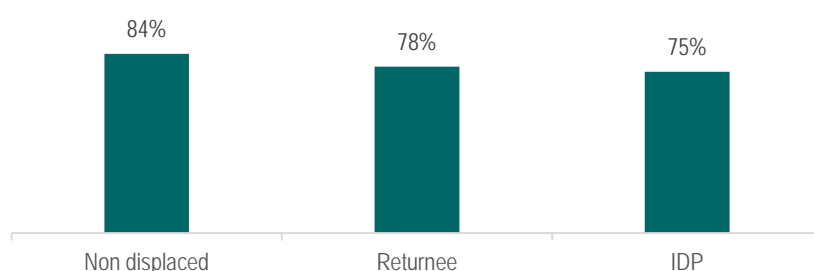
	Unprotected well	Mai moya/ mai ruwa <sup>9</sup>	Surface water	Unprotected spring	Unprotected rainwater tank	Water truck	Total
<b>Askira/Uba</b>							
IDP	24%	2%	18%	1%	4%	0%	49%
Non-displaced	57%	4%	1%	0%	0%	2%	63%
Returnee	52%	3%	11%	2%	2%	0%	69%
<b>Bayo</b>							
IDP	15%	8%	25%	6%	2%	0%	56%
Non-displaced	25%	7%	25%	8%	0%	0%	65%
Returnee	4%	2%	19%	6%	1%	0%	31%
<b>Biu</b>							
IDP	7%	47%	0%	0%	0%	0%	54%
Non-displaced	7%	12%	0%	0%	0%	0%	19%
Returnee	7%	19%	0%	0%	0%	0%	26%
<b>Chibok</b>							
IDP	36%	8%	2%	0%	1%	3%	50%
Non-displaced	39%	12%	11%	0%	0%	0%	62%
Returnee	25%	9%	1%	0%	0%	0%	35%
<b>Konduga</b>							
IDP	1%	0%	2%	0%	0%	0%	2%
Non-displaced	3%	4%	1%	0%	0%	0%	8%
Returnee	6%	1%	0%	0%	0%	1%	7%
<b>Kwaya Kusar</b>							
IDP	1%	6%	7%	1%	0%	0%	16%
Non-displaced	2%	29%	7%	0%	0%	1%	38%
Returnee	2%	12%	15%	3%	1%	0%	33%
<b>Mafa</b>							
IDP	0%	2%	0%	0%	0%	0%	2%
Non-displaced	11%	0%	0%	0%	0%	0%	11%
Returnee	2%	0%	0%	0%	0%	0%	2%
<b>Mobbar</b>							
IDP	16%	16%	0%	0%	0%	3%	35%
Returnee	12%	11%	2%	1%	0%	3%	28%
<b>Total</b>	<b>16%</b>	<b>9%</b>	<b>6%</b>	<b>1%</b>	<b>0%</b>	<b>0%</b>	<b>32%</b>

<sup>9</sup> Local water vendors who sell water on carts, either in jerry cans or small plastic sacs.

## WATER: QUANTITY

Despite overall better access to improved water sources by IDP households, access to an adequate quantity of water was reported as more of an issue amongst this group, as IDP households reported the lowest figures on water consumption of at least 15 litres per person per day (l/p/d). Twenty five percent (25%) of IDP households reported not consuming the Sphere standard minimum of 15 l/p/d<sup>10</sup> in the 7 days prior to the assessment, followed by 22% of returnee households and 16% of non-displaced households. The lack of adequate quantities of water increases the possibility of health concerns related to inadequate intake of drinking water or the use of unsafe alternative sources, and points to a limited capacity to uphold hygienic practices.

Table 7. Proportion of households meeting Sphere standard (min. 15L / person / day), by population group

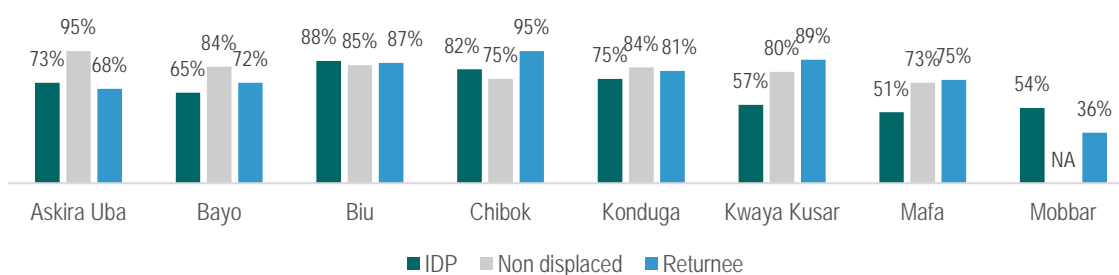


Populations reporting the highest proportion of households consuming a minimum of 15 l/p/d in the 7 days prior to the assessment were varied but predominantly located in the southern LGAs of Biu, Kwaya Kusar, Askira/Uba and Chibok. Returnees in Chibok and non-displaced in Askira/Uba reported the highest proportion of households consuming at least 15 l/p/d (95%), followed by returnees in Kwaya Kusar (89%). In Biu, all population groups reported relatively high figures on water consumption patterns (88% of IDP households, 87% of returnee households and 85% of non-displaced households reported consuming at least 15 l/p/d).

In contrast, only 36% of returnee households and 54% of IDP households in Mobbar reported consuming a minimum of 15 l/p/d. Moreover, 13% of both IDP households and returnee households in Mobbar reported a water consumption of under-five l/p/d. IDP households in Mafa (51%) and Kwaya Kusar (57%) also reported lower water consumption levels, when compared to other assessed locations.

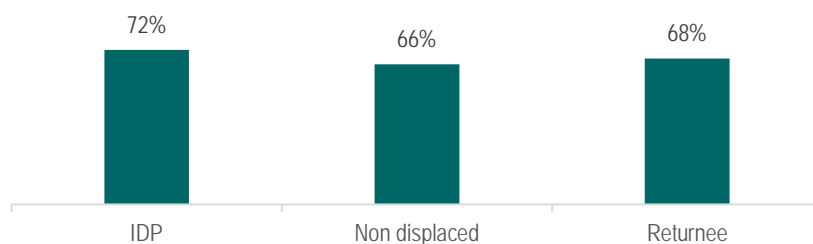
<sup>10</sup> See footnote 4.

Table 8. Proportion of households meeting Sphere standard (min. 15L / person / day), by LGA and population group



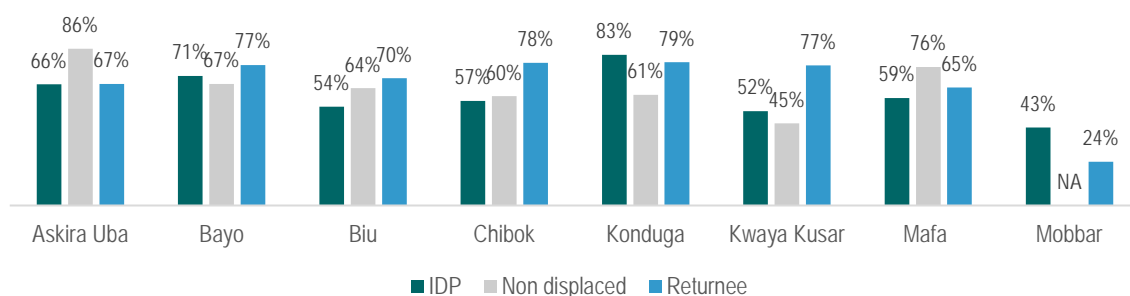
The assessment measured water quantity in both litres per person per day (“adequate quantity”) and **self-perceived sufficiency of water**. Overall, 72% of IDP households, 68% of returnee households and 66% of non-displaced households reported having sufficient water to meet household needs in the 30 days prior to the assessment, highlighting **no significant variation between population groups**. It is important to note that the proportion of households reporting having sufficient water to meet their needs, based on their own perceptions, was lower than the proportion of households having access to the minimum Sphere standard of 15 l/p/d for all population groups.

Table 9. Proportion of households reporting having sufficient water to meet household needs in the 30 days prior to the assessment, by population group



While there was no significant difference in access to sufficient quantities of water across population groups, there was a marked difference across LGAs. For instance, in Mobbar, only 24% of returnee households and 43% of IDP households reported having access to sufficient water to cover basic needs in the 30 days prior to the assessment. In comparison, populations in Askira/Uba and Konduga reported a far higher perception of having sufficient water to meet basic needs (86% for non-displaced households in Askira/Uba, followed by 83% of IDP households and 79% of returnee households in Konduga). This finding corresponds to population groups in Mobbar reporting the lowest proportion of households consuming a minimum of 15 l/p/d.

Table 10. Proportion of households reporting having sufficient water to meet household needs in the 30 days prior to the assessment, by LGA and population group



When asked about the reasons for having a low water consumption (under 15 l/p/d) a great majority of respondents<sup>11</sup> (89% of non-displaced households, 82% of IDP households and 78% of returnee households) reported not having enough containers to store or carry water. The only exception to this trend was Mobbar, where 59% of IDP households and 41% of returnee households indicated it was because they did not have enough water at their main water source. Other issues that were discussed during FGDs across LGAs were boreholes running on generators that only worked during certain times a day, usually running on solar-powered generators or boreholes running on generators requiring fuel the community cannot afford.

<sup>11</sup> Of those that reported a water consumption of less than 15 l/p/d.

## WATER: MAIN BARRIERS TO ACCESS

Table 11. Reported amount of time required to collect water

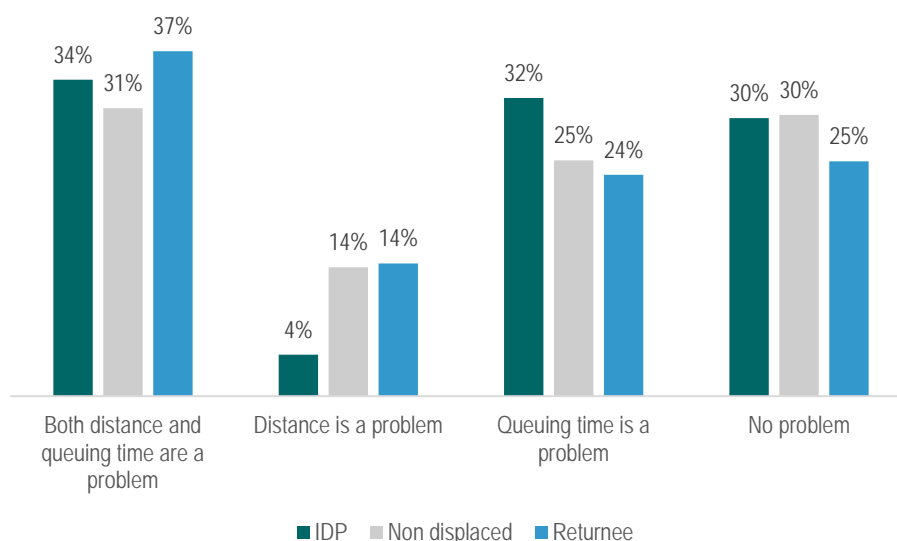
	30 min or less	More than 30 min, up to 1 hour	More than 1 hour
<b>Askira/Uba</b>			
IDP	37%	37%	24%
Non-displaced	82%	16%	2%
Returnee	64%	27%	9%
<b>Bayo</b>			
IDP	75%	25%	0%
Non-displaced	80%	15%	4%
Returnee	73%	18%	8%
<b>Biu</b>			
IDP	46%	45%	7%
Non-displaced	63%	33%	4%
Returnee	64%	31%	4%
<b>Chibok</b>			
IDP	41%	34%	23%
Non-displaced	51%	35%	14%
Returnee	60%	29%	11%
<b>Konduga</b>			
IDP	66%	22%	12%
Non-displaced	66%	24%	9%
Returnee	66%	21%	13%
<b>Kwaya Kusar</b>			
IDP	53%	34%	12%
Non-displaced	55%	41%	3%
Returnee	64%	30%	6%
<b>Mafa</b>			
IDP	63%	36%	1%
Non-displaced	56%	30%	13%
Returnee	67%	20%	13%
<b>Mobbar</b>			
IDP	74%	18%	8%
Returnee	57%	29%	13%

The total time required to fetch water at peak time highlighted little variation across population groups, with 65% of non-displaced households, 63% of returnee households and 62% of IDP households indicating it took them 30 minutes or less.

However, some significant differences were reported across and within LGAs. For instance, in terms of differences within LGAs, while 82% of non-displaced households in Askira/Uba reported taking 30 minutes or less when fetching water at their main water point, only 37% of IDP households in Askira/Uba reported so. In terms of differences across LGAs, none of the assessed IDP households in Bayo reported taking more than an hour when fetching water at their main water point, but 24% of IDP households in Askira/Uba and 23% of IDP households in Chibok did.

Longer times to fetch water could be attributed to either long distances or limited number of water points. During FGDs, the concern over long queues due to insufficient water points was frequently reiterated. **Participants also reported having to fetch water multiple times a day**, as they run out of water and do not have enough containers to store it.

Table 12. Proportion of households for whom fetching water constitutes a problem



The proportion of households for whom fetching water constitutes a problem in terms of both distance and queuing time showed no significant variation across population groups, with 37% of returnee households, 34% of IDP households and 31% of non-displaced households reporting that both distance and time were a problem. Thirty percent (30%) of IDPs households, 30% of non-displaced households and 25% of returnee households reported that the activity of fetching water did not constitute a problem for their household. Distance was a problem more commonly reported by non-displaced and returnee households. Queuing time was a problem more commonly reported by IDPs.

Mobbar had the highest proportion of households across population groups indicating that both distance and time constitute a problem when fetching water, as reported by 71% of returnee households and 69% of IDP households. Distance was a problem for 37% of IDP households in Askira/Uba, 35% of IDP households in Bayo and 32% of returnees in Bayo, the highest proportion across LGAs. Queuing time was a problem for 58% of non-displaced households in Mafa and 52% of returnee households in Mafa.

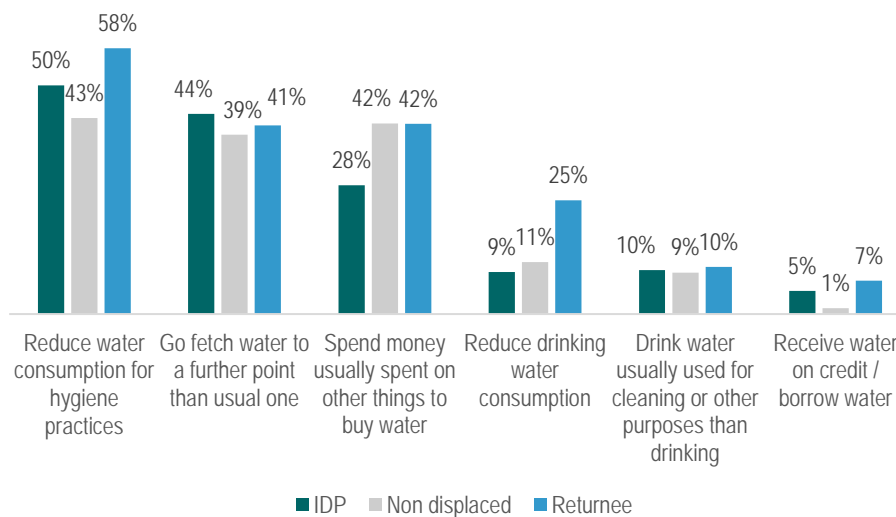
## WATER: COPING STRATEGIES

The main coping mechanisms households reported across all population groups was to reduce water for hygiene practices, such as bathing less (58% of returnee households, 50% of IDP households and 43% of non-displaced households), fetching water from further away (44% of IDP households, 41% of returnee households and 39% of non-displaced households) and spending money usually spent on other things to buy water instead (42% of non-displaced households, 42% of returnee households and 28% of IDP households).

Overall, all three population groups across Askira/Uba and Chibok reported reducing water consumption for hygiene practices (such as bathing less) as their main coping mechanism.

Receiving water on credit or borrowing water were the least used coping strategies across population groups and LGAs, with the exception of Mobbar, where it was reported by 30% of returnee households and 26% of IDP households. These reported coping strategies highlight exposure to health and protection risks.

Table 13. Main strategies to cope with a lack of water, by population group



Findings from household interviews were confirmed during the FGDs. Participants in FGDs reported going “for days without having a bath”, suspending washing their clothes or washing them at nearby springs, or fetching water from the river to do household chores that do not involve cooking. **Other coping mechanisms mentioned by participants were to borrow water from neighbours to meet urgent needs** and to walk longer distances to fetch water at other points, particularly during the dry season, an activity the elderly and the disabled population cannot do. During FGDs, **female participants also reported that they would start queuing early morning before water starts running, or sneaking out late at night (breaking curfew) to fetch water when others are sleeping.** This finding can potentially have great implications in terms of protection, as breaking curfew and walking long distances to fetch water expose women and girls to gender-based violence.



Table 14. Main coping mechanisms reported for those without sufficient access to water, by LGA and population group

	Reduce water consumption for hygiene practices	Go fetch water to a farther point	Spend money usually spent on other things to buy water	Reduce drinking water consumption	usually used for cleaning or other purposes than drinking	Receive water on credit / borrow water
<b>Askira/Uba</b>						
IDP	100%	40%	40%	8%	0%	3%
Non-displaced	78%	33%	6%	17%	28%	0%
Returnee	80%	27%	57%	25%	2%	0%
<b>Bayo</b>						
IDP	73%	20%	13%	7%	0%	0%
Non-displaced	43%	26%	28%	11%	0%	0%
Returnee	36%	52%	32%	24%	0%	0%
<b>Biu</b>						
IDP	29%	30%	54%	6%	2%	4%
Non-displaced	46%	33%	48%	22%	0%	0%
Returnee	29%	41%	56%	20%	0%	5%
<b>Chibok</b>						
IDP	70%	46%	42%	13%	28%	0%
Non-displaced	85%	35%	42%	13%	21%	6%
Returnee	64%	50%	43%	11%	0%	0%
<b>Konduga</b>						
IDP	44%	39%	17%	5%	9%	0%
Non-displaced	29%	56%	48%	6%	21%	0%
Returnee	56%	30%	26%	4%	4%	4%
<b>Kwaya Kusar</b>						
IDP	55%	35%	13%	5%	3%	3%
Non-displaced	21%	29%	59%	10%	1%	1%
Returnee	30%	37%	27%	27%	3%	3%
<b>Mafa</b>						
IDP	51%	59%	0%	16%	20%	0%
Non-displaced	24%	76%	24%	3%	3%	0%
Returnee	56%	42%	14%	7%	0%	0%
<b>Mobbar</b>						
IDP	89%	73%	30%	20%	10%	26%
Returnee	66%	71%	49%	36%	41%	30%

## SANITATION: ACCESS TO LATRINES

Table 15. Proportion of households reporting access to functioning latrines

	All members have access and use it	No members have access	All members have access but only some use it	Only some members have access to a latrine
<b>Askira/Uba</b>				
IDP	86%	9%	5%	0%
Non-displaced	86%	10%	4%	0%
Returnee	95%	2%	4%	0%
<b>Bayo</b>				
IDP	88%	10%	0%	2%
Non-displaced	96%	0%	3%	1%
Returnee	76%	13%	8%	3%
<b>Biu</b>				
IDP	85%	6%	4%	5%
Non-displaced	90%	5%	3%	2%
Returnee	92%	6%	1%	1%
<b>Chibok</b>				
IDP	70%	15%	11%	4%
Non-displaced	90%	4%	5%	1%
Returnee	89%	9%	1%	1%
<b>Konduga</b>				
IDP	76%	24%	0%	0%
Non-displaced	73%	21%	2%	3%
Returnee	58%	22%	9%	11%
<b>Kwaya Kusar</b>				
IDP	90%	5%	5%	0%
Non-displaced	91%	2%	7%	1%
Returnee	85%	8%	4%	3%
<b>Mafa</b>				
IDP	72%	21%	7%	0%
Non-displaced	74%	19%	3%	4%
Returnee	60%	27%	2%	9%
<b>Mobbar</b>				
IDP	65%	22%	8%	5%
Returnee	54%	32%	9%	5%

A majority of households across population groups reported that all members in the household have access to a functioning latrine<sup>12</sup> and use it (86% of non-displaced households, 83% of returnee households and 76% of IDP households). A lower proportion of IDP households reported that all members in the household have access to a functioning latrine and use it when compared to other population groups. A small proportion of households reported that all members have access but only some use the latrines or that only some members have access to a latrine. Out of these households, female children were the group most commonly reported to not have access to a functioning latrine or to not use a functioning latrine they have access to.

Reported access to functioning latrines was lowest in Mobbar, Konduga and Mafa. In Mobbar, 32% of returnee households and 22% of IDP households reported that no household member had access to a functioning latrine. In Konduga, 24% of IDP households, 22% of returnee households and 21% of non-displaced households reported similar challenges. In Mafa, 27% of returnee households, 21% of IDPs and 29% of non-displaced had no access to functioning latrines.

<sup>12</sup> For the purposes of this assessment, both communal latrines and household latrines are considered. Functioning latrine was defined in accordance with the definition provided by WHO as "toilet facilities that protect human health by preventing contamination of the environment with human faecal waste". See *Bulletin of the World Health Organization* 2015;93:509-510. doi: <http://dx.doi.org/10.2471/BLT.14.144980>.

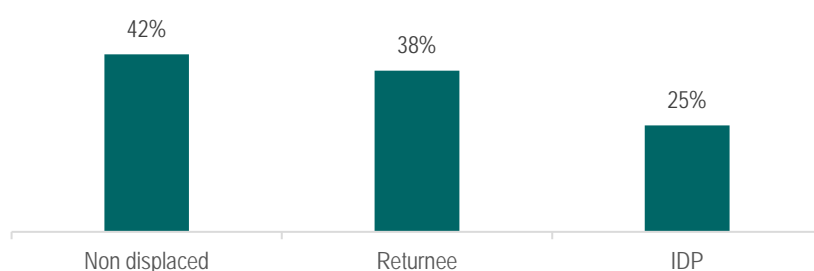
In contrast, non-displaced in Bayo (96%), returnees in Askira/Uba (95%) and returnees in Biu (92%) reported the greatest proportion of households where all members have access to a functioning latrine.

During FGDs, male participants reported that those who do not have latrines in their shelter either go to a nearby shelter with facilities, or to the bush for open defecation as some reportedly prefer not going into other shelters with available functioning latrines as married women may be residing inside these houses. **Returnee women in Mobbar reported going to the bush during daytime and using a bucket system at night.** This highlights serious protection and health risks that populations expose themselves to due to a lack of adequate sanitation facilities.

### SANITATION: WASTEWATER AND GARBAGE DISPOSAL

Wastewater in the vicinity (30 metres or less) was reported to be visible by 42% of non-displaced households, 38% of returnee households and 25% of IDP households in the 30 days prior to the assessment. **Non-displaced households in Askira/Uba and returnee households in Mobbar reported the highest proportion of visible wastewater, at 49% and 48% respectively.** The lowest proportion of households across population groups reporting visible wastewater in the vicinity in the 30 days prior to the assessment came from IDP households in Konduga, where only 16% reported it.

Table 16. Proportion of households reporting visible wastewater, by population group



During FGDs, non-displaced participants in Konduga also reported an increase in visible wastewater during rainy season. While IDP participants in Konduga reported no visible wastewater inside the camp, returnees reported visible wastewater everywhere in the community as there allegedly is no proper channel put in place for disposal. Non-displaced participants reported having built a waterway out of their house that runs into a nearby bush area.

Table 17. Proportion of households reporting visible wastewater, by LGA and population group

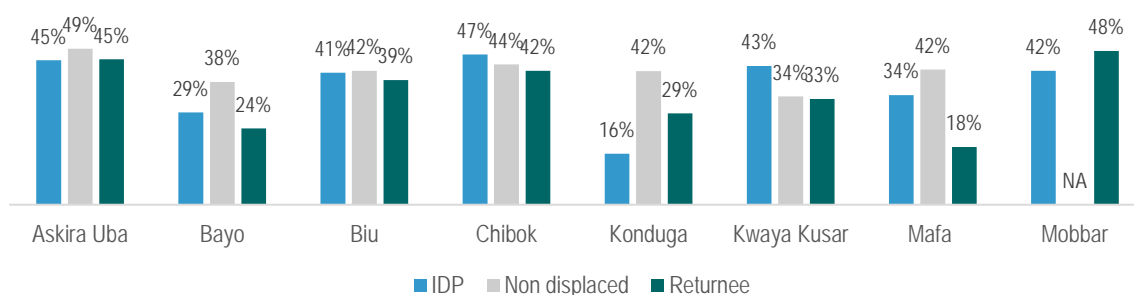


Table 18. Proportion of households by garbage disposal method

	Garbage is left in public areas and not collected	Garbage is buried or burned	Garbage is deposited in designated areas and collected through public system
<b>Askira/Uba</b>			
IDP	58%	42%	0%
Non-displaced	60%	37%	3%
Returnee	70%	30%	1%
<b>Bayo</b>			
IDP	73%	27%	0%
Non-displaced	70%	28%	1%
Returnee	68%	31%	1%
<b>Biu</b>			
IDP	68%	31%	2%
Non-displaced	72%	23%	5%
Returnee	68%	24%	8%
<b>Chibok</b>			
IDP	63%	37%	0%
Non-displaced	48%	52%	0%
Returnee	70%	29%	1%
<b>Konduga</b>			
IDP	28%	46%	25%
Non-displaced	52%	44%	4%
Returnee	60%	39%	2%
<b>Kwaya Kusar</b>			
IDP	80%	11%	10%
Non-displaced	77%	19%	4%
Returnee	68%	27%	5%
<b>Mafa</b>			
IDP	31%	47%	22%
Non-displaced	61%	39%	0%
Returnee	58%	41%	1%
<b>Mobbar</b>			
IDP	68%	21%	11%
Returnee	57%	18%	26%

Only 19% of IDP, 5% of returnee and 2% of non-displaced households across LGAs reported using a public collection system as the most common way for garbage disposal, highlighting significant gaps in municipal garbage service provision and exposure of households to significant health risks.

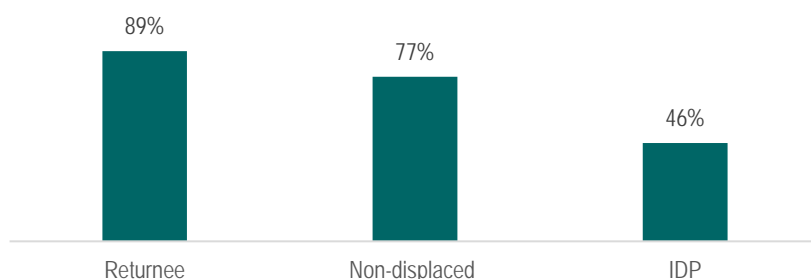
Kwaya Kusar was the LGA where garbage being left in public areas and not collected was mostly reported, by 80% of IDP households, 77% of non-displaced households and 68% of returnee households. Konduga and Mafa were the LGAs where most households reported burying or burning the garbage as their main method for garbage disposal.

During FGDs carried out in Konduga, returnee participants expressed their concern over how some people dump their waste anywhere in the community. Non-displaced participants reported children being particularly at risk, as they gather to play at points where garbage is disposed.

## HYGIENE: SOAP

There was a considerable statistically significant difference of soap ownership at the time of assessment between population groups. While 89% of returnee households and 77% of non-displaced households reported owning soap, only 46% of IDP households did so.

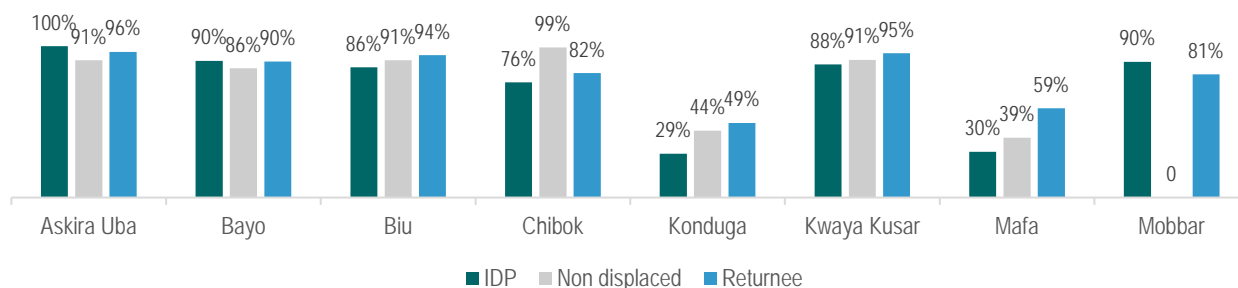
Table 19. Proportion of households reporting owning soap, by population group



Marked statistically significant differences were also observed across LGAs. Overall, households in Konduga and Mafa reported the lowest soap ownership across LGAs and population groups as only 29% of IDP households, 44% of non-displaced households and 49% of returnee households in Konduga, and 30% of IDP households, 39% of non-displaced households and 59% of returnee households in Mafa reported owning soap.

During FGDs, some of the coping strategies that were mentioned by participants included using ash, lemon or lime as a substitute for soap. Additionally, some participants reported selling the food given to them during food distributions to be able to afford soap and other household needs. Some returnee participants also reported trying to avoid contact with contaminated objects as a coping mechanism for the lack of soap.

Table 20. Proportion of households reporting owning, by LGA and population group



## HYGIENE: HANDWASHING AT CRITICAL TIMES AND HYGIENE PROMOTION

**The most reported handwashing critical time for a majority of respondents<sup>13</sup> across population groups was before eating:** 92% of IDPs, 88% of non-displaced and 85% of returnees reported washing their hands before eating. However, there was a statistically significant difference in practices at other handwashing critical times between returnee and non-displaced, and IDPs, with 66% of returnees and 63% of non-displaced but only 45% of IDPs reporting washing their hands after defecating. Figures show an even greater contrast when groups wash their hands before preparing food, with 49% of returnees, 42% of non-displaced but only 24% of IDPs reporting to wash. **Only 35% of IDP households, 13% of returnee households and 9% of non-displaced households indicated having received hygiene promotion messaging or training in the last year.**

**A very low proportion of households across population groups reported both washing their hands before feeding a baby (23% of returnees, 18% of non-displaced and 12% of IDPs) and after disposing of a baby's faeces (18% of returnees, 13% of non-displaced and 8% of IDPs).** This suggests that a more targeted approach can be taken to the content of hygiene messages. Awareness on hand-washing before handling children and sensitization to the risks of not washing hands after defecation should be a clear area of focus for actors running hygiene promotion campaigns. **Only 35% of IDP households, 13% of returnee households and 9% of non-displaced households indicated having received hygiene promotion messaging or training in the last year.**

IDPs in Biu (77%) and Bayo (75%) presented the lowest proportions of households washing their hands before eating. **IDPs in Konduga presented the lowest figures in four of the five handwashing critical times across LGAs and population groups: after defecating (only 36%), before preparing food (only 8%), before feeding a baby (only 3%) and after disposing of a baby's faeces (only 1%).**

That a very low proportion of respondents reported not washing their hands during critical times could be due to a number of reasons including lower levels of soap ownership, and the low proportion of households that reported having received hygiene promotion messaging or training. **Only 35% of IDP households, 13% of returnee households and 9% of non-displaced households indicated having received hygiene promotion messaging or training in the last year.**

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<sup>13</sup> Reported % of respondents. This figure differs from the rest of the report where households is the unit of analysis.

## Understanding of Cholera Prevention

- Most FGD participants had heard of cholera and many knew how it can be contracted, reporting that “a person can contract cholera when taking water from the river or when food is not covered and flies touch it” or “when one eats contaminated food, thereby causing one to vomit and purge consistently”.
- Most participants reported that cholera can be treated by giving Oral Rehydration Salts (ORS) treatment or “bitter lemon” to the patient before taking them to a nearby clinic. However, while some participants stressed the importance of giving “non-herbal medication” to patients with cholera, others indicated they give “local herbs” or “potash and lime” to treat it.
- Most participants reported not further treating the water after fetching it from their main water point. Some participants reported using “alum” or “water guards” to treat water, either purchased at the local market or given to them by NGOs. A majority of participants reported merely covering the water containers with a lid.

Table 21. Proportion of households reporting washing their hands at critical times, by LGA and population group

	Before eating	After defecating	Before preparing food	Before feeding the baby	After disposing of a baby's faeces
<b>Askira/Uba</b>					
IDP	96%	87%	89%	67%	46%
Non-displaced	86%	69%	43%	10%	7%
Returnee	91%	73%	55%	27%	14%
<b>Bayo</b>					
IDP	75%	87%	38%	13%	17%
Non-displaced	85%	72%	40%	11%	15%
Returnee	97%	50%	40%	20%	3%
<b>Biu</b>					
IDP	77%	53%	47%	26%	21%
Non-displaced	85%	78%	57%	21%	16%
Returnee	93%	50%	46%	21%	10%
<b>Chibok</b>					
IDP	82%	74%	51%	22%	13%
Non-displaced	84%	75%	57%	42%	25%
Returnee	83%	78%	54%	17%	9%
<b>Konduga</b>					
IDP	98%	36%	8%	3%	1%
Non-displaced	89%	57%	50%	17%	10%
Returnee	98%	55%	31%	17%	18%
<b>Kwaya Kusar</b>					
IDP	93%	58%	60%	34%	10%
Non-displaced	95%	47%	32%	14%	7%
Returnee	80%	62%	42%	18%	18%
<b>Mafa</b>					
IDP	90%	56%	47%	16%	12%
Non-displaced	92%	45%	19%	10%	11%
Returnee	87%	57%	48%	13%	17%
<b>Mobbar</b>					
IDP	81%	68%	63%	47%	29%
Returnee	80%	67%	63%	43%	40%



## HYGIENE: MENSTRUAL HYGIENE

Issues relating to menstrual hygiene were not included in the quantitative survey as many household respondents were male. However, FGDs with female participants specifically included questions on menstrual hygiene management. During FGDs, **most female participants reported preferring to be given reusable pieces of cloth or reusable sanitary pads.** Female participants also reported washing reusable cloth menstrual pads with soap, and when soap is not available, with ash, or with lime and potash. When the cloths become old or worn out female participants reported burying them or throwing them into the functioning or non-functioning latrines. **Some of the women participants reported burying reusable pads in a secluded area late at night.** A few women reported sharing reusable sanitary pads with friends or neighbours. Unhygienic hygiene practices such as throwing sanitary pads into functioning or non-functioning latrines, burying sanitary pads, or sharing sanitary pads with friends or neighbours constitute risky practices that can potentially have health implications for women.

## CONCLUSION

This assessment aims to provide actionable information for immediate WASH partner interventions in Borno state. The findings in this report cover a broad range of WASH topics across all three population groups, and where relevant, across LGAs. The following conclusions can be drawn:

- In terms of the use of improved water sources, **IDP households (85%) reported the highest usage of an improved water source as a main water source across population groups. In contrast, returnee households (58%) reported the lowest usage.** In terms of use of improved water sources across LGAs, of particular concern are returnees in Askira/Uba and non-displaced in Askira/Uba, Bayo and Chibok, as these populations reported the lowest proportion of households using an improved water source as the main water source used for drinking, cooking and bathing.
- In terms of households having access to an adequate quantity of water, **non-displaced households (84%) reported the highest proportion of households with a water consumption of at least 15 l/p/d. In contrast, IDP households (75%) reported the lowest water consumption.** In terms of water consumption across LGAs, of particular concern are IDPs in Kwaya Kusar, IDPs in Mafa and IDPs in Mobbar, as well as returnees in Mobbar, as these populations reported the lowest proportion of households with a minimum water consumption of 15 l/p/d.
- In terms of issues encountered when fetching water, findings showed little variation across population groups with 65% of non-displaced, 63% of returnees and 62% of IDP households indicating it took them 30 minutes or less to fetch water at their main water point (return peak travel at peak time). In terms of variation across LGAs, of specific concern are IDPs in Askira/Uba, IDPs in Biu and IDPs in Chibok. More than half of IDP households in these LGAs reported taking over 30 minutes to fetch water at their main water point.
- In terms of soap ownership, there was a considerable statistically significant difference between population groups. Highest proportion of soap ownership was reported by returnee households (89%). Lowest proportion of soap ownership was reported by IDP households (46%). In terms of soap ownership across LGAs, of particular concern are IDPs in Konduga, IDPs in Mafa and non-displaced in Mafa, as these population groups reported the lowest proportion of households owning soap.
- In terms of hygiene promotion messaging or training, **only 35% of IDP households, 13% of returnee households and 9% of non-displaced households indicated having received hygiene promotion messaging or training in the last year.** For handwashing critical times, very low proportions of households across population groups reported both washing their hands before feeding a baby (23% of returnee households, 18% of non-displaced households and 12% of IDP households) and after disposing of a baby's faeces (18% of returnee households, 13% of non-displaced households and 8% of IDP households).
- In terms of access to a functioning latrine, little variation was found across population groups. Access was reported highest amongst the non-displaced population with 86% of assessed households reporting having to a functioning latrine. In contrast, IDP households (86%) reported

the lowest access to functioning latrines. Of specific concern are all population groups in Mobbar, Konduga and Mafa, where the lowest access to functioning latrines was reported.

- In terms of environmental challenges, a very small proportion of households across LGAs and population groups reported having in place a garbage collection system.

Findings in this assessment lead to the following recommendations:

- Ensure equal access to improved water sources across LGAs and population groups. Improved water sources like boreholes have the potential to bring good quality water to population groups with current limited access in locations like Askira/Uba, Bayo and Chibok.
- Incorporate improved water structures for returnee households, as this population group reported the lowest use of improved water sources as a main water source for drinking, cooking and bathing.
- Bring attention to the lower quantities of water that IDPs have access to, as one in four IDP households reported not meeting the minimum Sphere standard of 15 l/p/d.
- Prioritize resource-based carriers in Non-Food Items (NFI) distributions, particularly as a great majority of assessed households (89% of non-displaced, 82% of IDPs and 78% of returnees) attributed low water consumption to not having enough containers to store or carry water.
- Work to provide better access to water sources for all population groups in Mobbar, where only 54% of IDP assessed households and 36% of returnee households reported meeting the minimum Sphere standard of 15l/p/d. In contrast with all other LGAs, assessed households in Mobbar reported that the main reason for having a low water consumption was due to not having enough water at the main water source.
- Guarantee better access to functioning latrines for all household members, in particular in Konduga, Mafa and Mobbar, where the lowest proportion of households where all members have access to a functioning latrine and use it was reported.
- Improve overall latrine conditions, particularly in regards to their maintenance, cleanliness and safety.
- Prioritize the number of soap bars in core NFI package distributions, particularly for IDPs in Konduga and Mafa, where the lowest proportions of soap ownership were reported.
- Prioritize the distribution of reusable sanitary pads in core NFI distributions, as female participants reported a strong preference for reusable cloths or pads to manage menstrual hygiene.
- Increase the frequency of hygiene promotion trainings, particularly stressing on the importance of washing one's hands before feeding a baby and after disposing of a baby's faeces.
- Improve wastewater management in Askira/Uba, Chibok and Mobbar, where over 40% of households in all population groups reported visible wastewater in the vicinity, coming from either a water source or from household wastewater.
- Only 19% of IDP households, 5% of returnee households and 2% of non-displaced households reported using a public collection system as the most common way for garbage disposal. To the

extent possible, it would be worthwhile for WASH actors to support the development of garbage collection systems at the local level.

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