



Federal Ministry of Water Resources

Water Sanitation and Hygiene National Outcome Routine Mapping 2021

Summary of Survey Findings



THE WORLD BANK
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National Bureau of Statistics



Overview

Access to climate resilient safe drinking water, sanitation and hygiene remains a recurring challenge in Nigeria. Progress in the sector, achieved through the collaborative efforts of Government and Development Partners is often dwarfed by the growing population. While the Covid-19 pandemic and the national cholera outbreak in 2021 presented an opportunity for investment in water sanitation and hygiene, with significant focus on hand hygiene, their impact on socio-economic activities has adversely affected gains in the WASH sector.

The 2021 WASH NORM is the third in the series of national assessments of the status of WASH Services launched in 2018, to provide reliable, comprehensive, and up-to-date WASH data to inform strategic decision making and address critical gaps in the sector. The vast amount of data collected under the WASH NORM can be used for strategic, efficient, and equitable budget allocation and use of resources; devising and implementing well-targeted, effective policies and programmes; and monitoring and reporting on progress towards achieving the global SDG 6.1 and 6.2, and in meeting national goals including the National Open Defecation Free Roadmap, Partnership for Expanded WASH (PEWASH) and National Action Plan for Revitalization of the WASH sector.

The survey collects and succinctly disaggregates WASH data across the different states and geopolitical zones, area of residence and demographic groups, gender, and wealth quintiles. In addition, it contains information on quality, dependability, and adequacy of WASH services, which are critical components of the Joint Monitoring Programme (JMP) definition of safely managed WASH services and sustainable access.

The 2021 WASH NORM was funded by the Federal Government of Nigeria and conducted under the overall leadership of the Federal Ministry of Water Resources. Technical and financial support was provided by UNICEF and the World Bank. The National Bureau of Statistics, the agency with the mandate to conduct national surveys in Nigeria, managed data collection and statistical analysis across the 36 states of the Federation and the Federal Capital Territory. This survey broadly focuses on three components: household assessments of WASH service levels, facility-based assessments of WASH infrastructure and mapping of urban water utilities. The exercise also included household expenditure parameters and water quality assessments.

This infographic summarizes the findings from the survey and complements the main report.



10%
Have access to basic water, sanitation, and hygiene services



67%
Use basic drinking water services



10 liters
Average per capita volume of water for rural population



46%
Use basic sanitation services



48 million
People practice open defecation



17%
Households have access to basic hygiene services



11%
Schools have basic water sanitation and hygiene services



6%
Health facilities have basic water sanitation and hygiene services



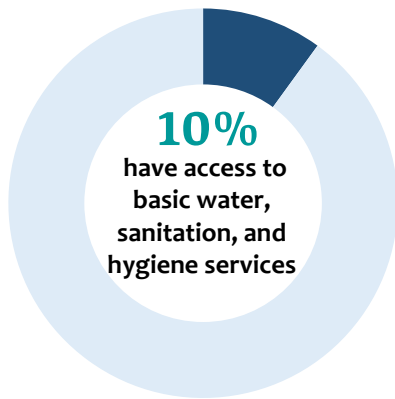
4%
Markets and Motor parks have basic water sanitation and hygiene services



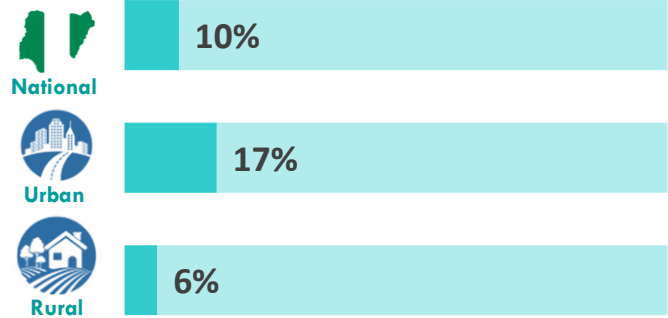
11%
Of households had at least one diarrhoea case in the past 2 weeks

Access to Basic WASH Services in Nigeria

The overall status of the WASH Sector in Nigeria is low. Only 10% of the population have access to complete basic water, sanitation, and hygiene services, using the global JMP definitions. Those living in rural areas are three times more disadvantaged than those in urban areas.



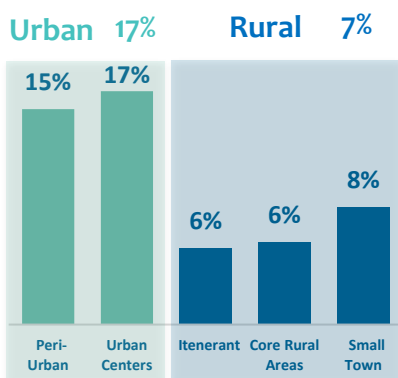
Access to WASH Services by Area of Residence



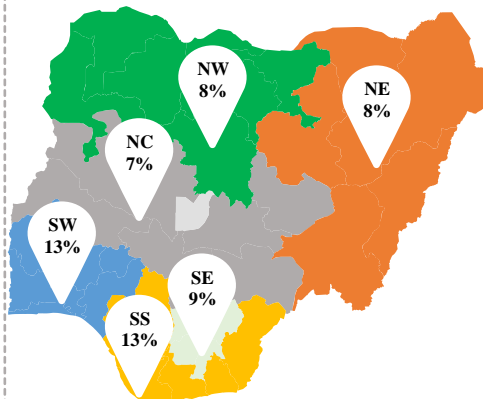
Equity in Access to Basic WASH Services

Disparities were observed in the use of basic WASH services across different areas of residence, geopolitical zones, and socioeconomic lines. The most significant disparities are related to wealth. The wealthiest households are about ten times more likely to access basic WASH Services than the poorest households.

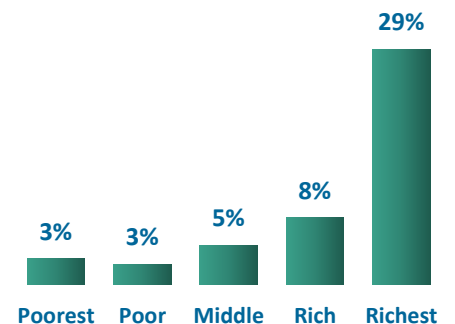
Access to WASH Services by Area of Residence



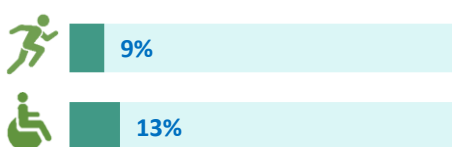
Access to WASH Services by Geopolitical Zones



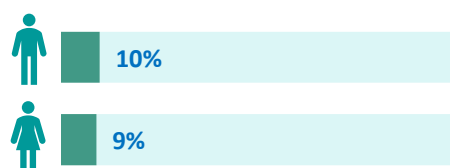
Access to WASH Services by Wealth Quintiles



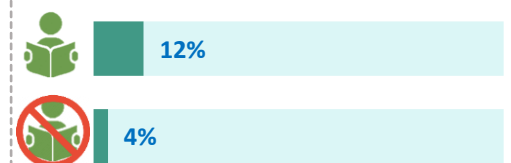
Access to WASH Services by Household with Persons Living with Disabilities



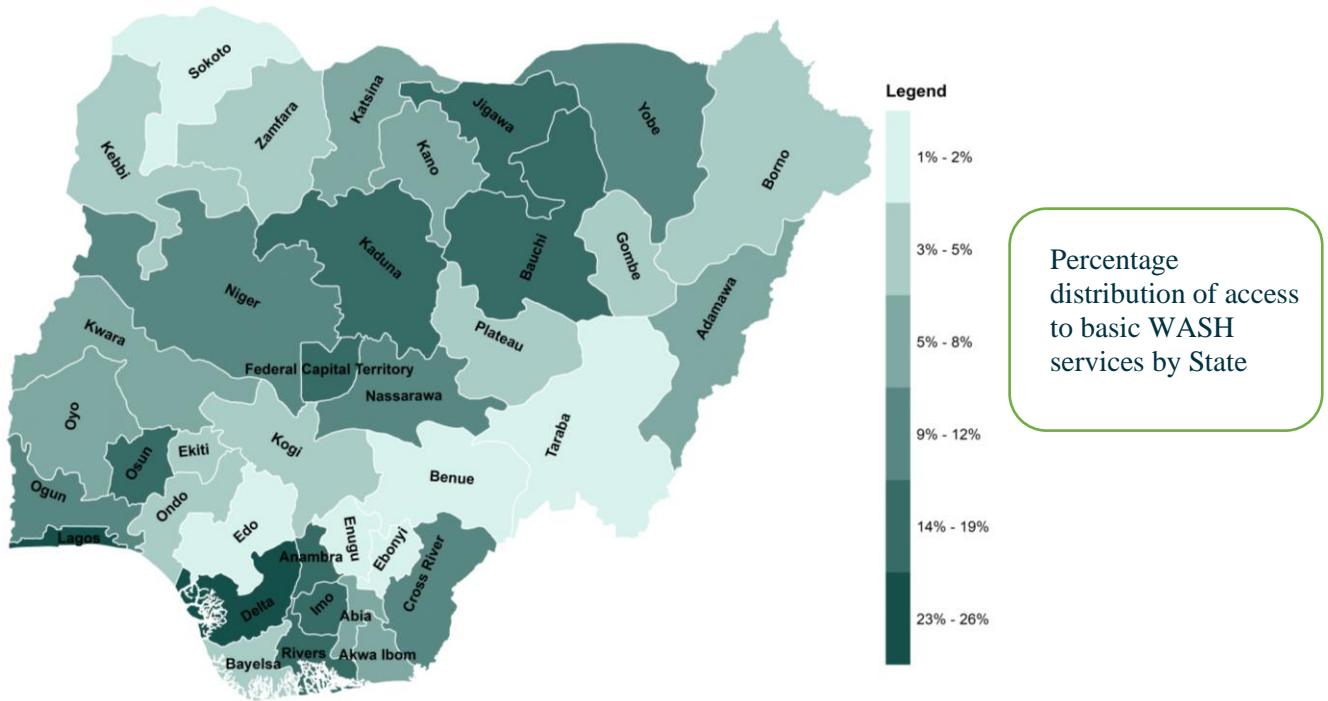
Access to WASH Services by Gender of Household Head



Access to WASH Services by Education of Household Head (Literate vs. Non-Literate)

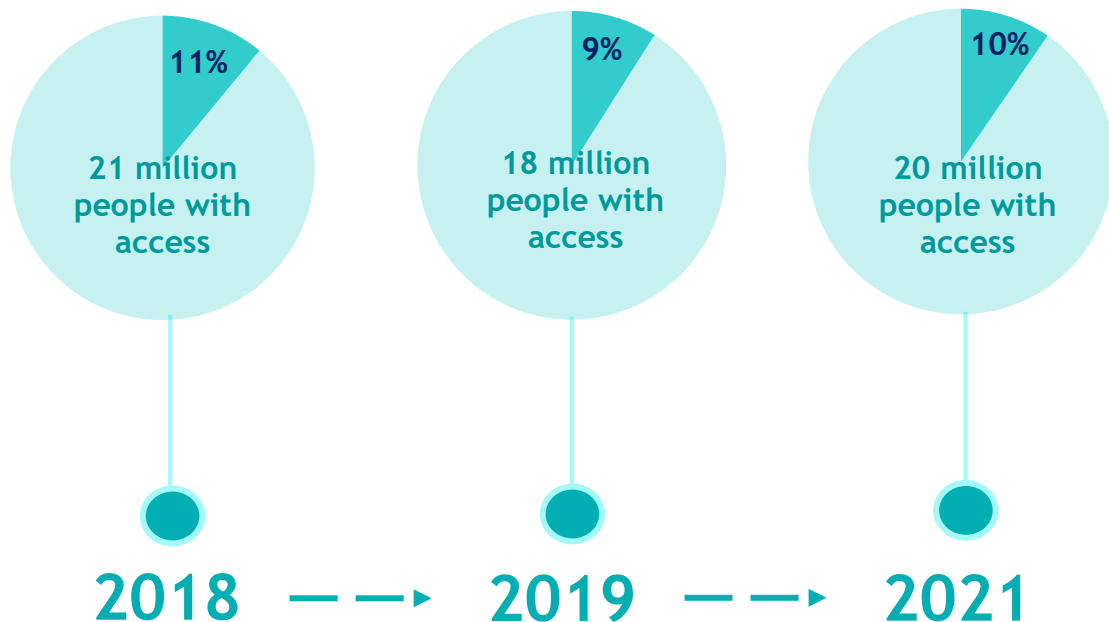


Area Value Map of Nigeria Showing Access to Basic WASH Services across States



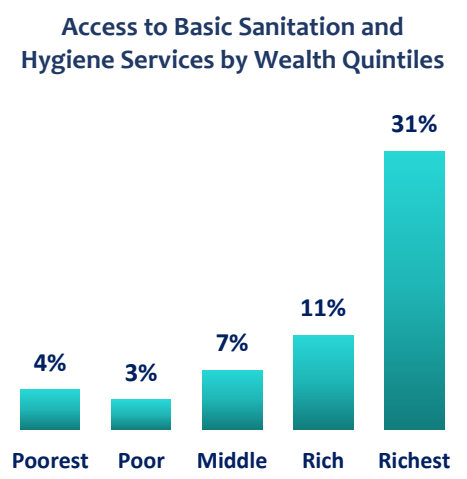
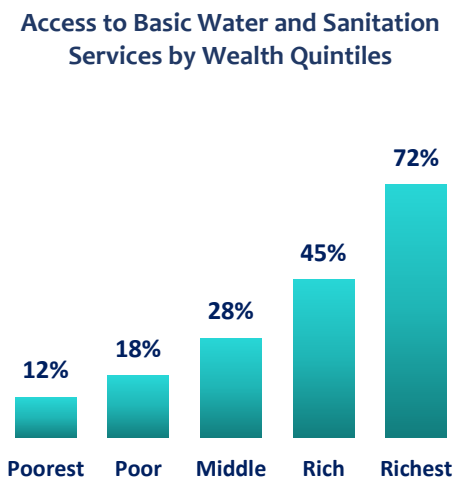
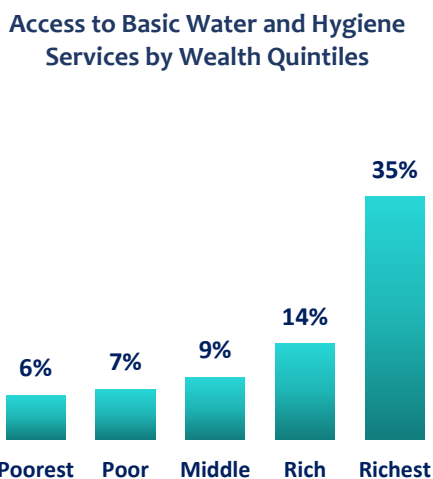
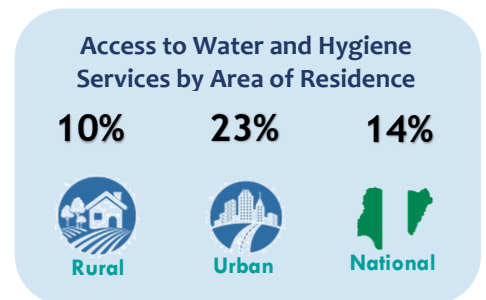
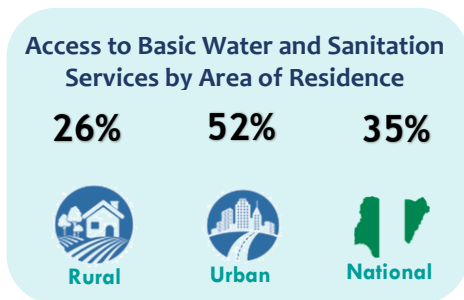
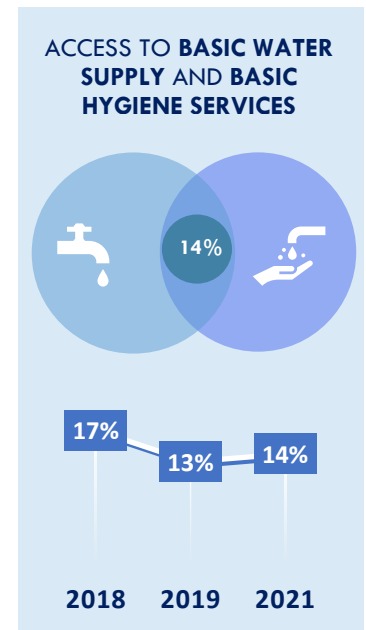
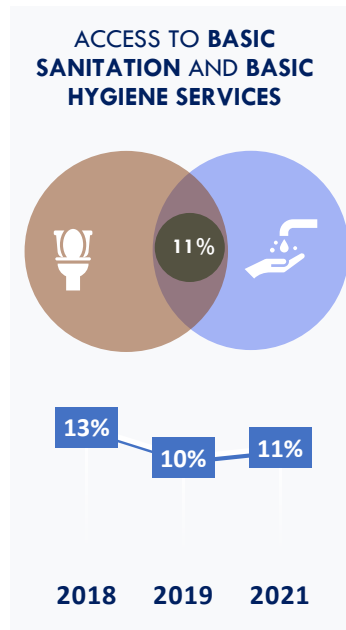
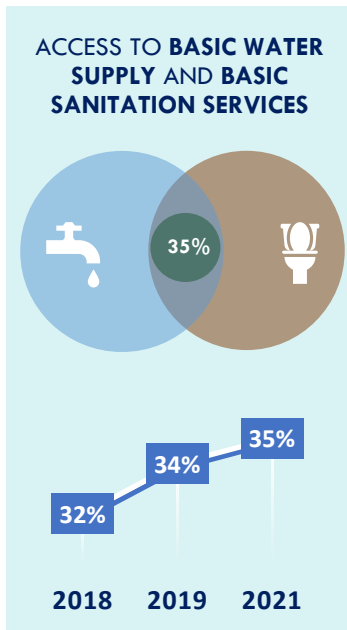
Trends in Access to Basic WASH Services

The trend shows a drop of 3 million in the number of people with access to basic WASH services from 21 million in 2018 to 18 million in 2019. However, an additional 2 million people gained access to basic WASH services between 2019 and 2021. In comparison, the population of Nigeria increased by 3 million from 198 million in 2018 to 201 million in 2019 and by an additional 5 million to 206 million in 2021. The modest gains in access to basic WASH services is dwarfed by the increasing population.



Access to Basic Water, Sanitation and Hygiene Services in Nigeria

Access to different combinations of basic water, sanitation and hygiene also show an overall low WASH status in Nigeria, with WASH services more accessible to people living in urban areas and those amongst the richest wealth quintiles.



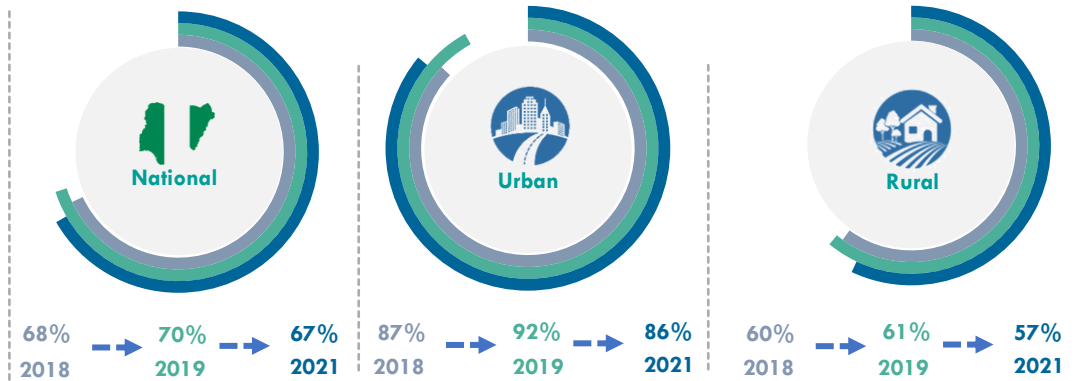
Access to Basic Drinking Water Supply Services

About 67% of Nigerians have access to basic drinking water supply services. This is a 3% decline from the 2019 WASH NORM data. This decline is also reflected amongst those living in the urban and rural areas as access level in 2019 was higher than 2021.



67%
Have access to basic drinking water supply services

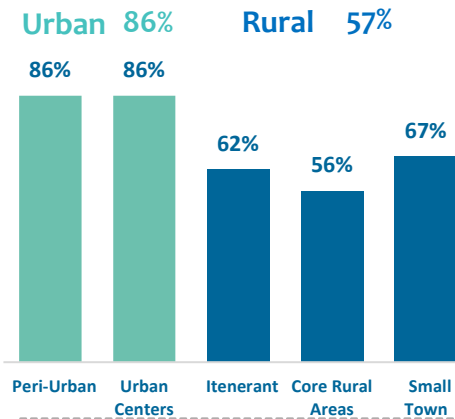
Trends in the use of basic drinking water supply (2018 – 2021)



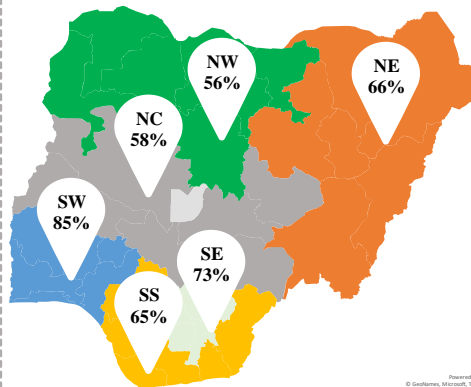
Equity in Access to Basic Water Supply Services

Access to basic water supply services amongst the richest household is twice higher than that of the poorest household. Access based on area of residence reveals that people in the rural areas have 29% less access than people in the urban areas.

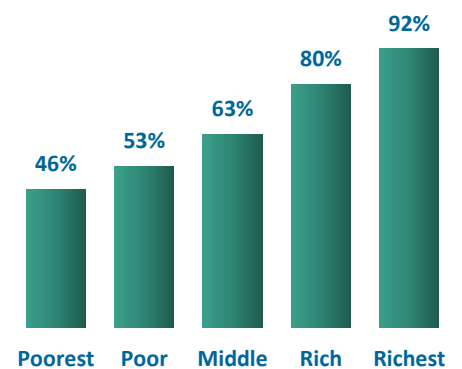
Access to Basic Water Supply Services by Area of Residence



Access to Basic Water Supply Services by Geopolitical Zones



Access to Basic Water Supply Services by Wealth Quintiles



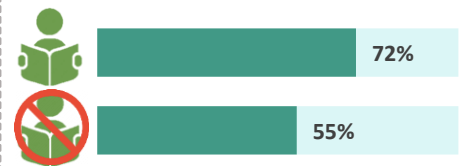
Access to Basic Water Supply Services by Household with Persons Living with Disabilities



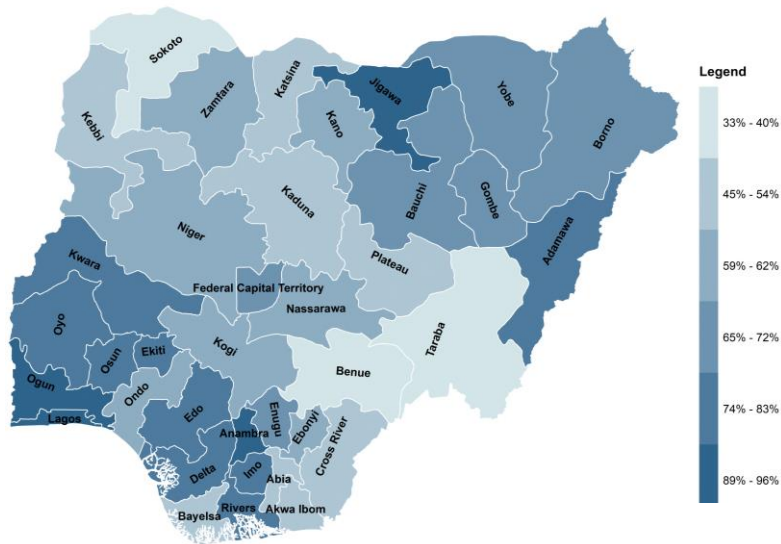
Access to Basic Water Supply Services by Gender of Household Head



Access to Basic Water Supply Services by Education of Household Head (Literate vs. Non-Literate)



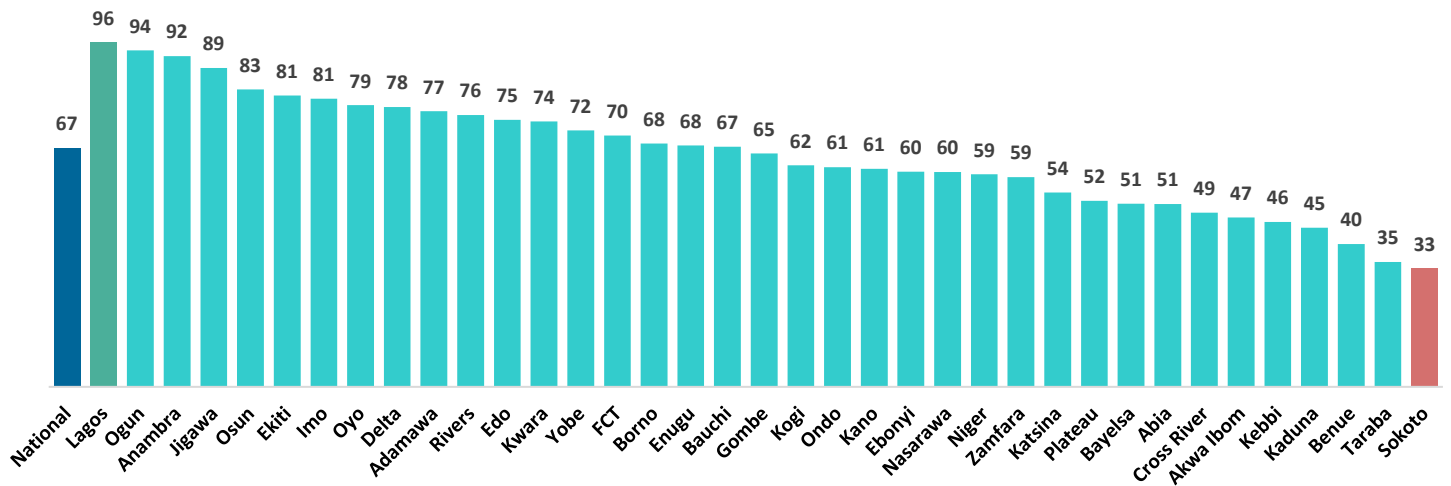
Area Value Map of Nigeria Showing Access to Basic Water Supply Services Across States



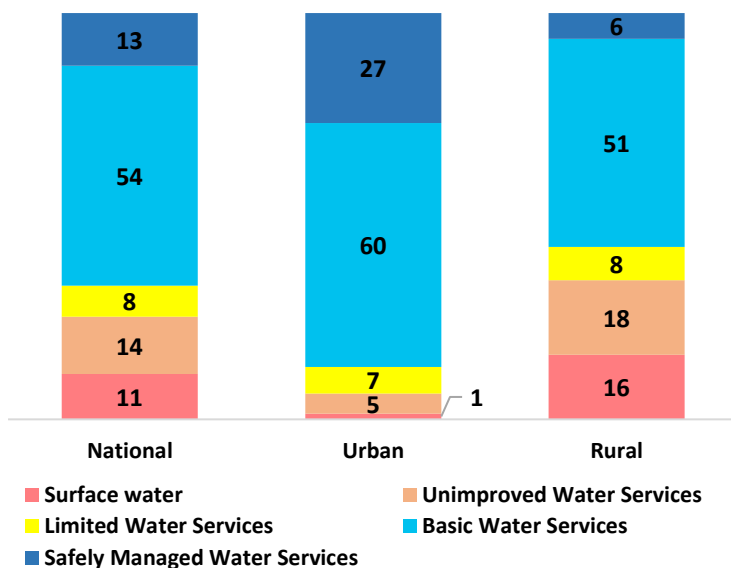
Access to Basic Water Supply Services by State

People in Lagos are three times more likely to use basic water supply than people living in Sokoto.

Access to Basic Water Supply Services by State



Water Supply Services Ladder



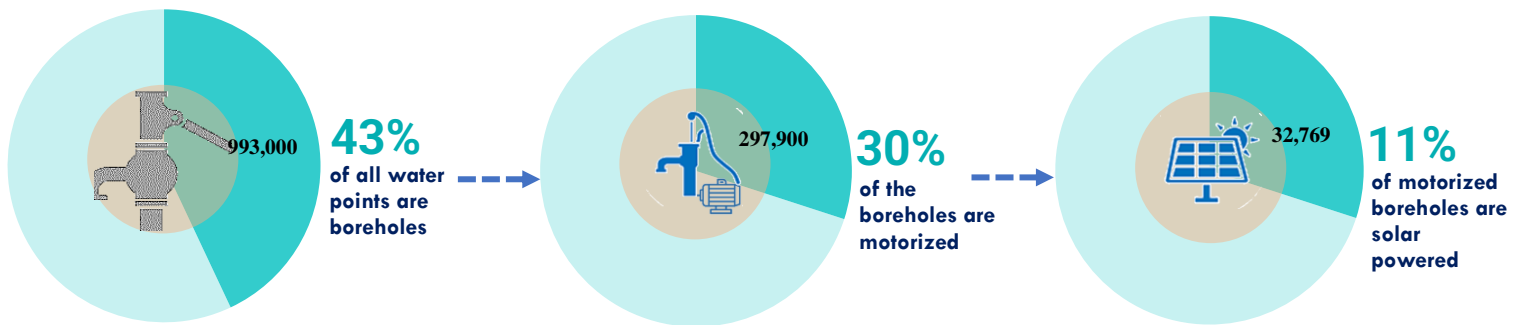
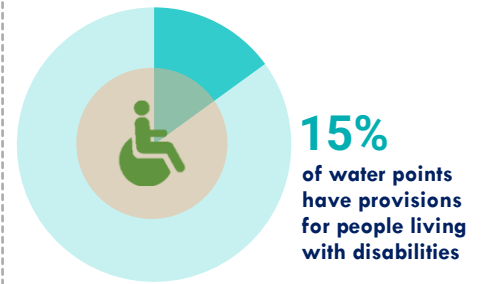
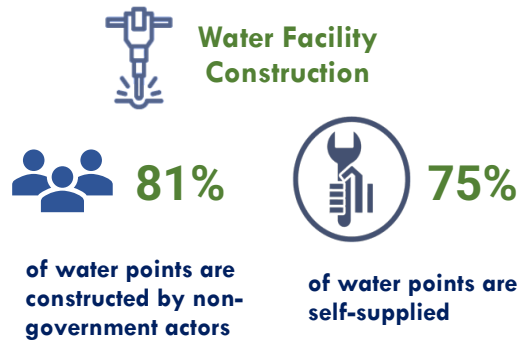
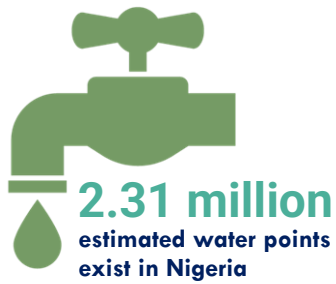
Notes:

Based on WHO/UNICEF JMP definitions.

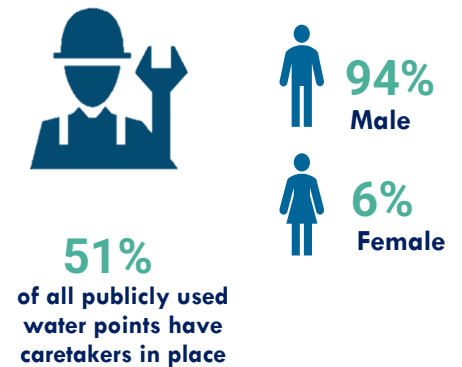
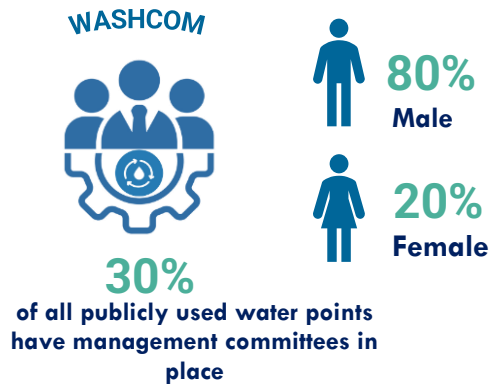
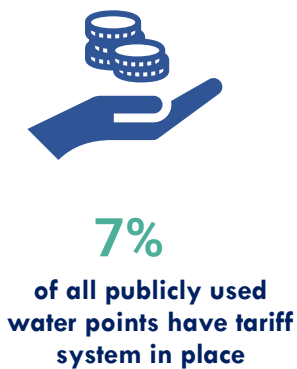
- **Safely Managed Services** are improved sources within premises, available when needed and free from fecal coliform
- **Basic Water Services** are improved drinking water sources in which collection time is not more than 30 minutes for a round trip, including queuing
- **Limited Water Services** are improved drinking water sources for which collection time exceeds 30 minutes for a round trip, including queuing
- **Unimproved Water Services** are drinking water sources from an unprotected well or unprotected spring
- **Surface Water** are drinking water sources from a river, dam, lake, pond, stream, or irrigation canal.

Characteristics of Water Supply Systems in Nigeria

There are 2.31 million water points in Nigeria, 75% are self-supplied, 43% of these are boreholes and less than one-fifth have provisions for people living with disabilities.

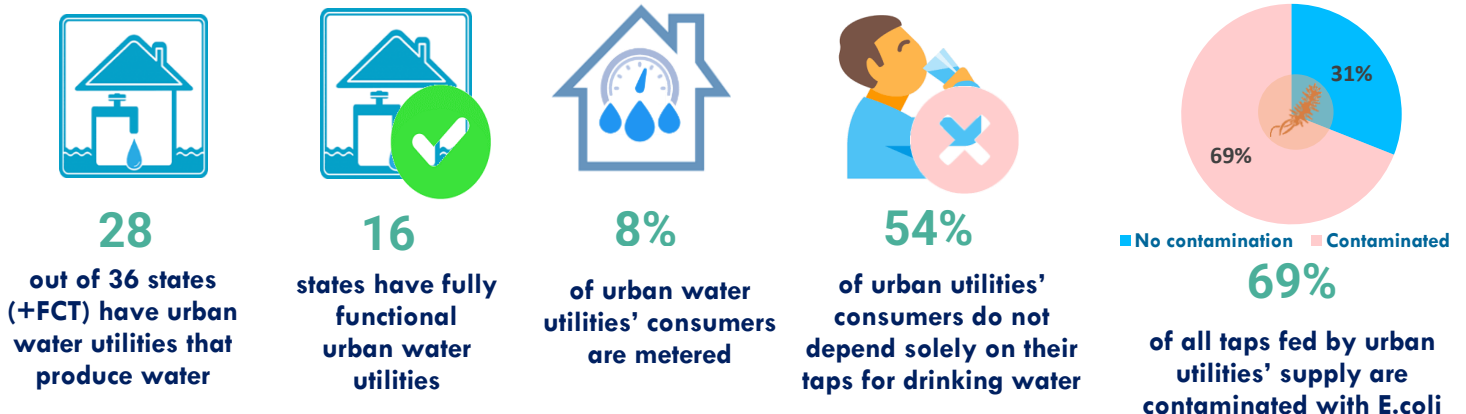


Management of Publicly used Water Points



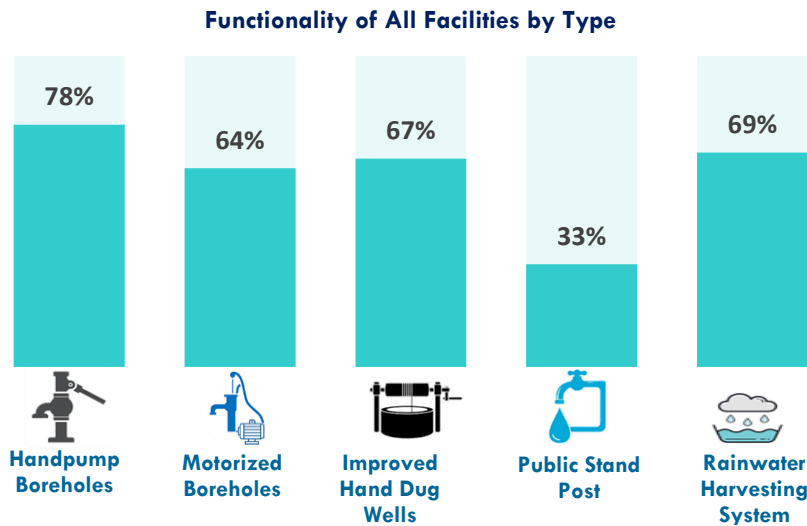
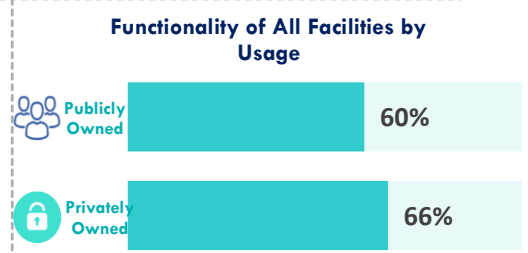
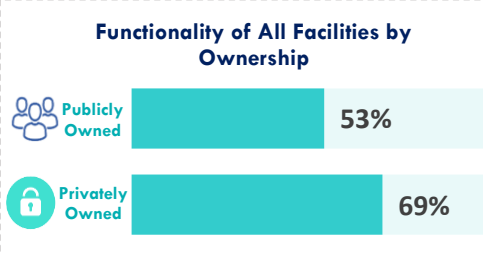
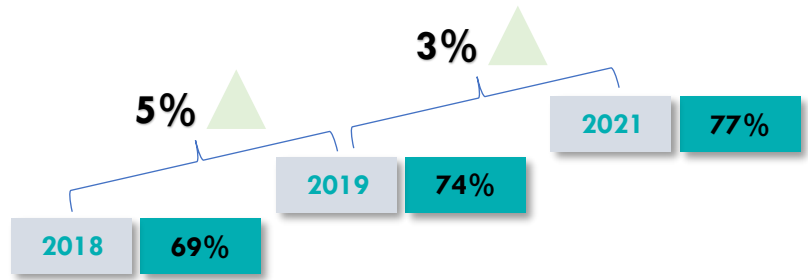
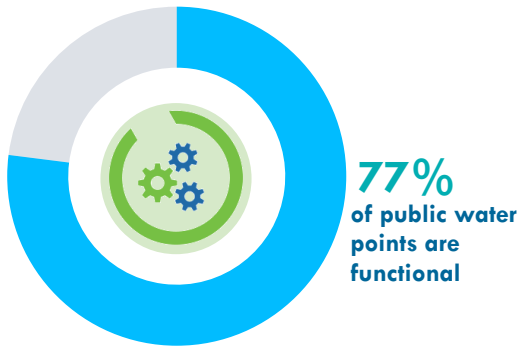
Status of Urban Water Utilities

Public water utilities are currently producing water in only 28 out of 36 states, plus the federal capital territory. In 16 states, the public utilities are classified as functional, that is, consistently producing water, supplying to active consumers, and collecting user fees.



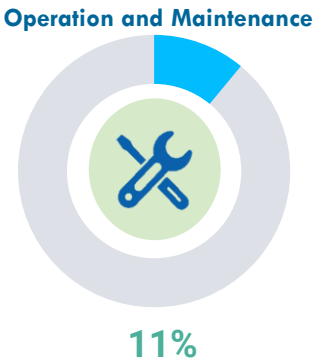
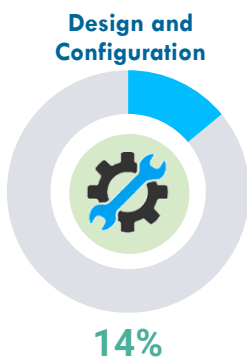
Functionality of Water Systems in Nigeria

Up to 77% of publicly owned water points are functional, an eight-percentage point cumulative increase from 2018. There are only minor disparities across area of residences, ownership, usage, and water facility type.



Dependability of Public Water Systems in Nigeria

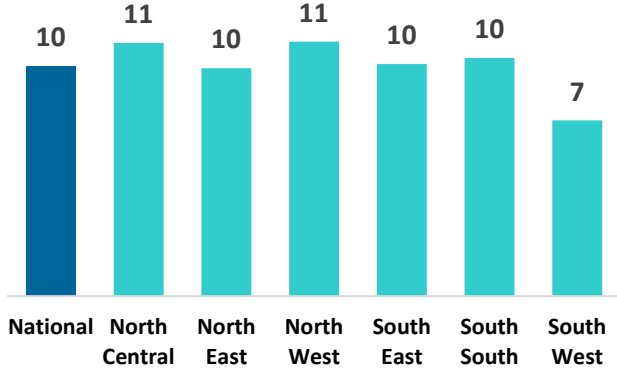
About 14% of water points are dependable with respect to their design and configuration, 59% are dependable with respect to their functionality and only 11% are dependable with respect to their operation and maintenance.



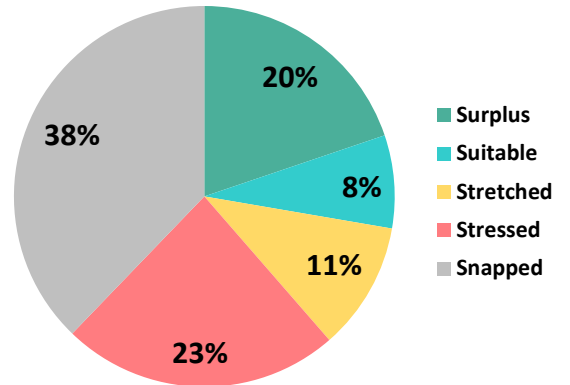
Adequacy of Water Systems in Nigeria

In rural areas, the average per capita share of drinking water is 9litres/person/day. Only 19% of the population are using water supply systems in rural areas that meet the adequacy threshold of providing “sufficient” quantities of water or a minimum of 16 liters of water per person per day for those living within 500 meters from the water system.

Per Capita Share of Water by Geopolitical Zones (liters/person/day)



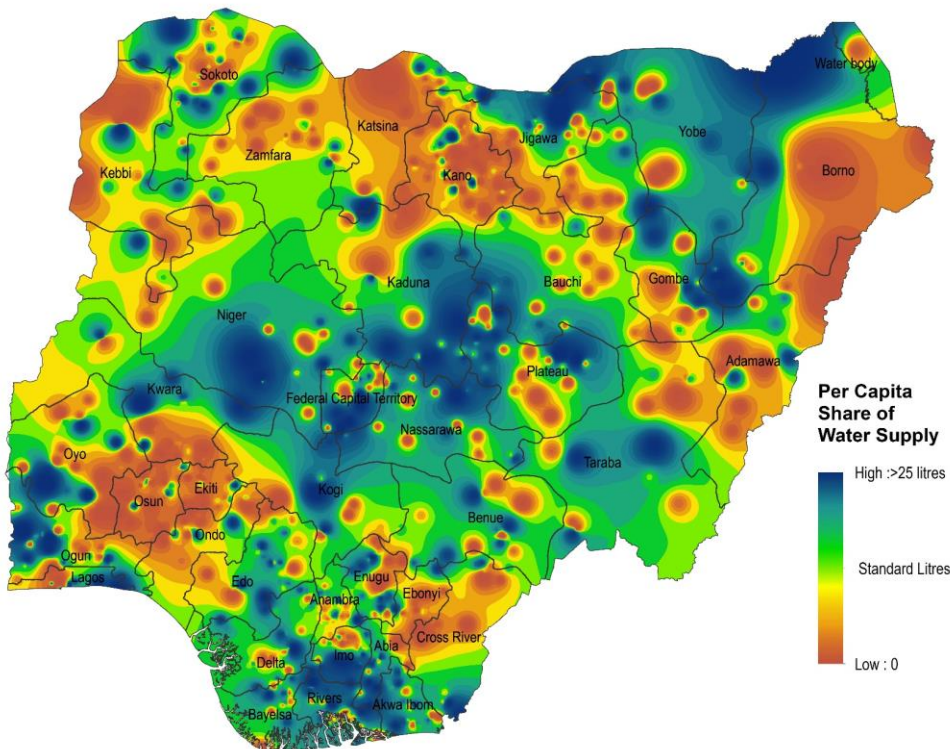
Per Capita Share of Water by Population Served



Notes:

- “**Snapped**” water facilities refers to systems that are not contributing to per capita share due to non-functionality
- “**Stressed**” water facilities are systems that are serving more than **three** times the population they should serve and providing **less than 5** liters per capita share
- “**Stretched**” water facilities are systems that are serving about **twice** the population they should serve and providing between **5 and 12** liters in per capita share
- “**Suitable**” systems meet the prescribed per capita share in line with National Standards and providing between **12 and 16** liters in per capita share
- “**Sufficient**” water facilities are systems meeting the per capita share of **16 liters and above**

Map Showing the Per Capita Share of Water across Nigeria

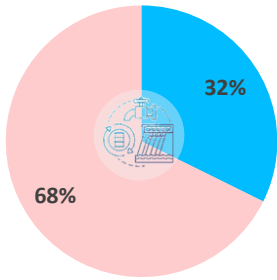


Per capita share of water supply across the country. Dark blue areas represent high levels of per capita share while dark orange areas represent low levels of per capita share

Status of Water Quality in Households in Nigeria

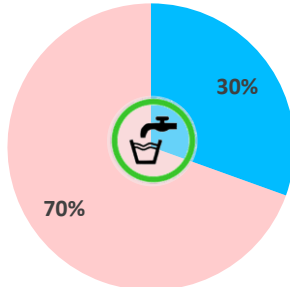
About 70% of drinking water at source and point of consumption within households are contaminated with E.coli. Rural dwellers are exposed to more contaminated drinking water than urban dwellers.

Quality of Drinking Water at the Source (All Sources)



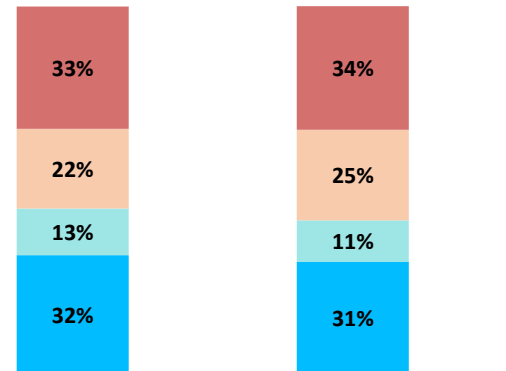
■ No contamination ■ Contaminated

Quality of Drinking Water at the Point of Consumption



■ No contamination ■ Contaminated

E. Coli Load at Water Source and Point of Consumption

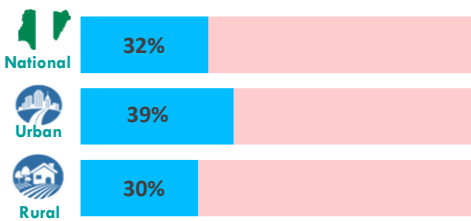


At Water Source
 ■ Low (<1 per 100ml)
 ■ High (11 - 100 per 100ml)

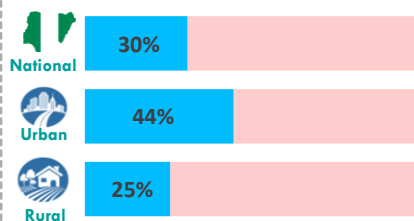
Point of Consumption
 ■ Moderate (1 - 10 per 100ml)
 ■ Very High (>100 per 100ml)

About a third of all drinking water both at the source and within the household contain very high E. Coli concentrations

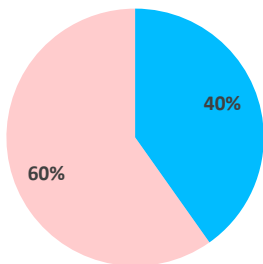
Proportion of uncontaminated drinking water at source by area of residence



Proportion of uncontaminated drinking water at point of consumption by area of residence



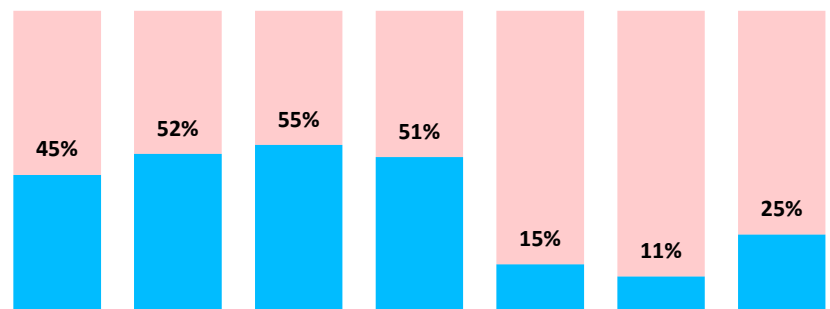
Quality of Improved Drinking Water Sources



■ No contamination ■ Contaminated

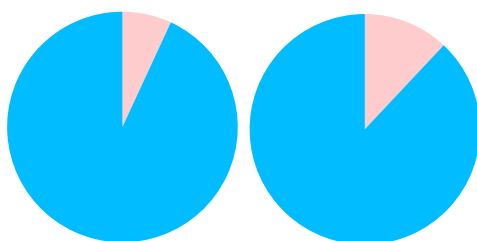
More than half of all improved drinking water sources are contaminated

Proportion of Uncontaminated Improved Drinking Water Sources by Household's Facility type

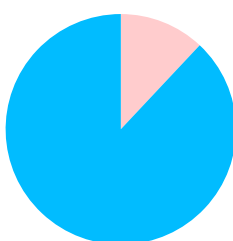


■ No contamination ■ Contaminated

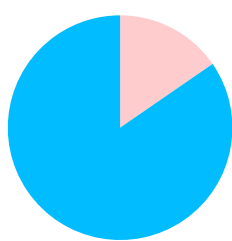
Organoleptic Test at Drinking Water Source



■ Has Odour (7%)
 ■ No Odour (93%)

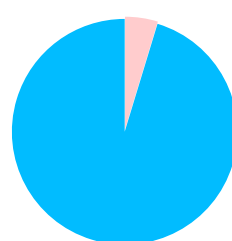


■ Has Colour (12%)
 ■ No Colour (88%)

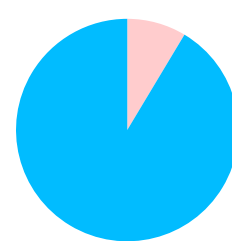


■ Has Turbidity (15%)
 ■ No Turbidity (85%)

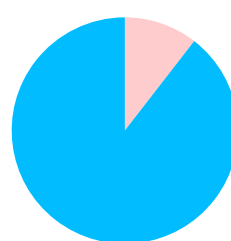
Organoleptic Test at Point of Consumption



■ Has Odour (5%)
 ■ No Odour (95%)



■ Has Colour (9%)
 ■ No Colour (91%)

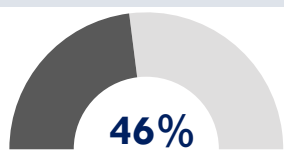


■ Has Turbidity (11%)
 ■ No Turbidity (89%)

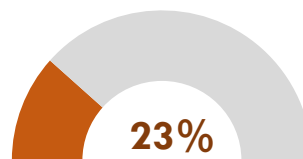
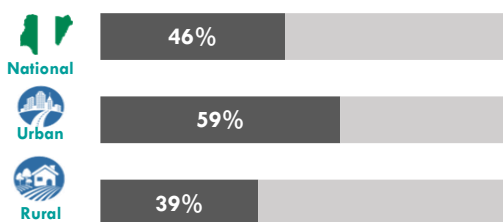
The organoleptic quality is the result of evaluating water based on smell, taste, color, and turbidity

Access to Basic Sanitation Services

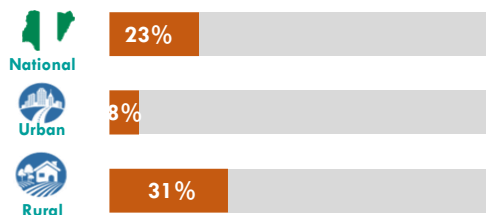
About 46% of the population have access to basic sanitation services, while 23% of Nigerians continue to practice open defecation. In comparison to 2019 WASHNORM data, there has been little progress in the achievement of universal access to basic sanitation services.



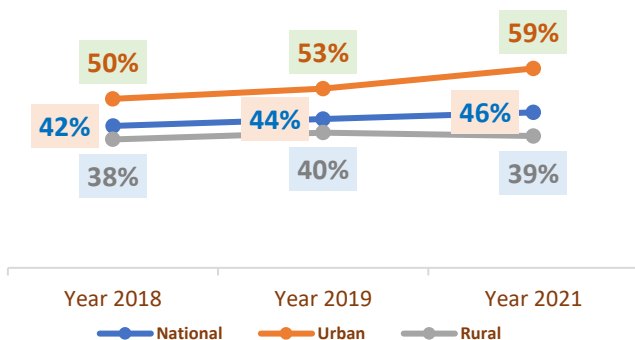
have access to basic sanitation services



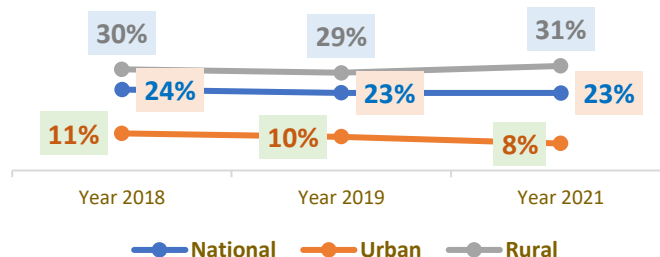
practice open defecation



Trends in the use of Basic Sanitation Services (2018 – 2021)

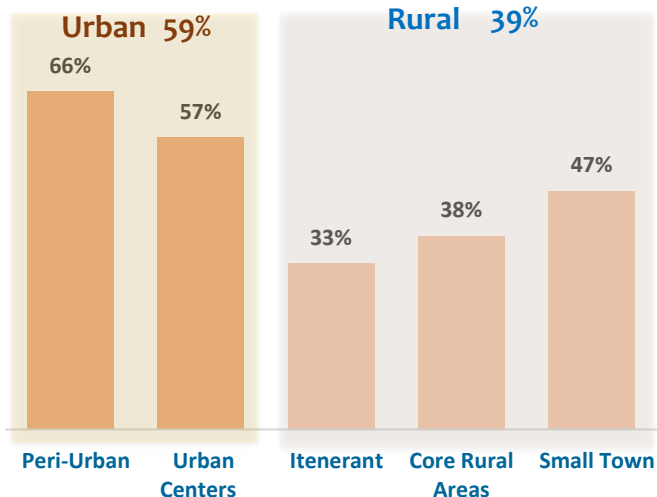


Trends in Open Defecation (2018 – 2021)

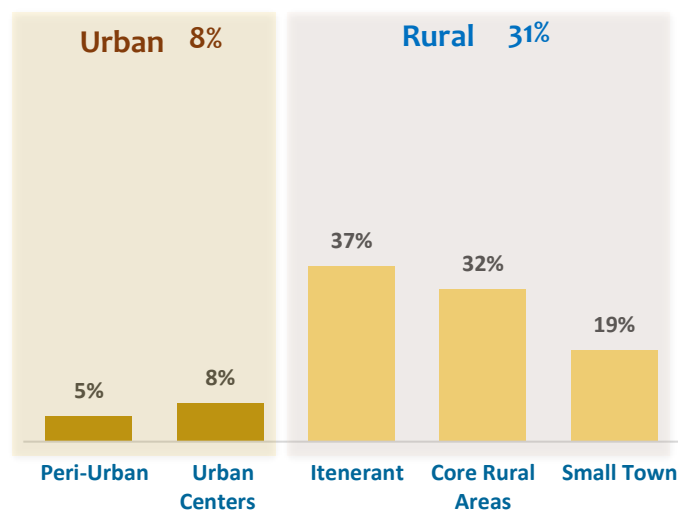


Equity in Access to Basic Sanitation Services

Access to Basic Sanitation Services by Area of Residence

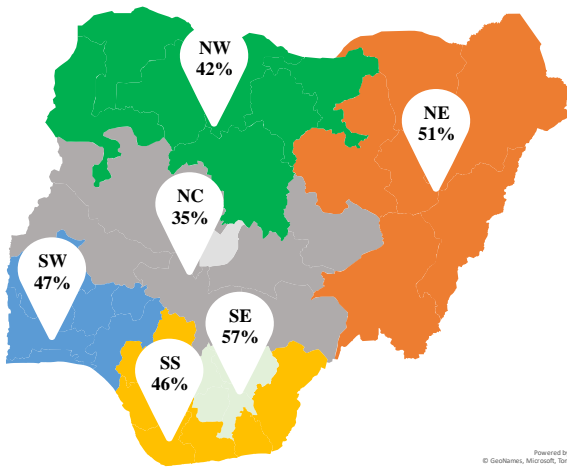


Open defecation by Area of Residence

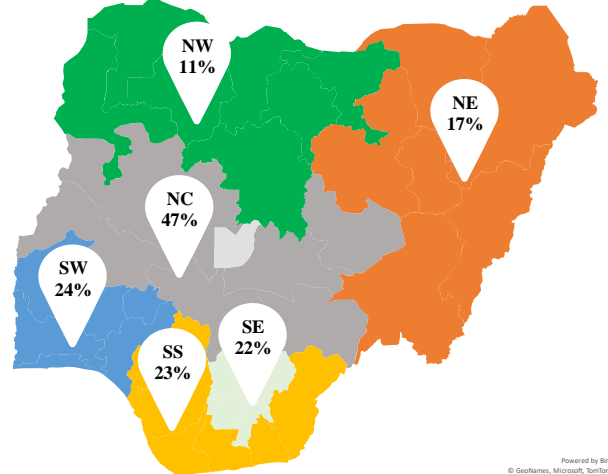


Equity in Access to Sanitation Services

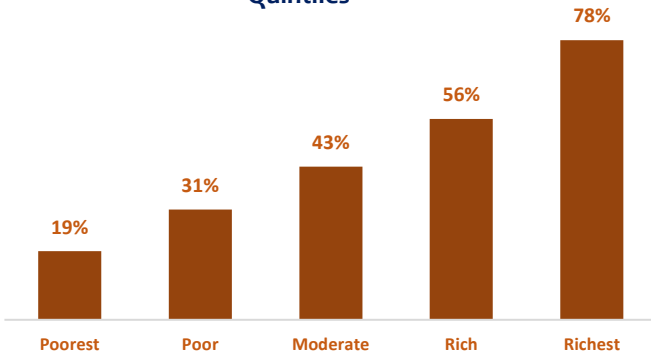
Access to Basic Sanitation Services by Geopolitical



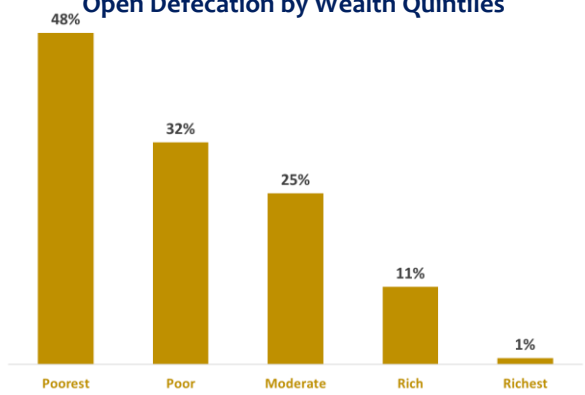
Open Defecation by Geopolitical Zones



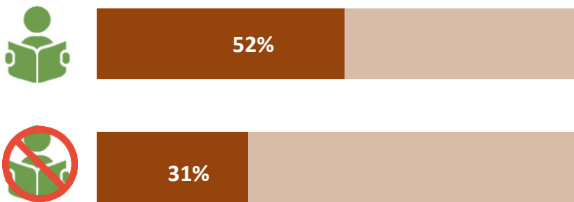
Access to Basic Sanitation Services by Wealth Quintiles



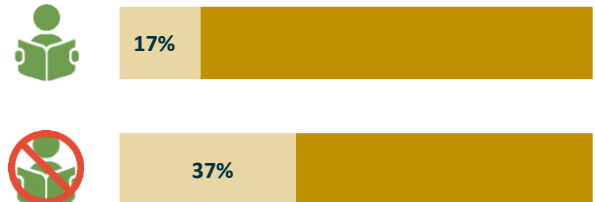
Open Defecation by Wealth Quintiles



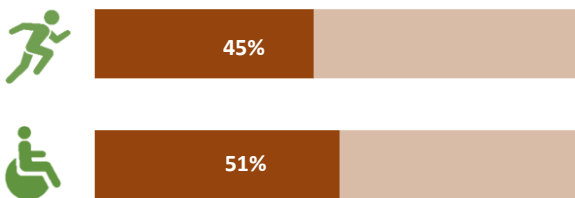
Access to Sanitation Services by Education of Household Head (Literate vs. Non-Literate)



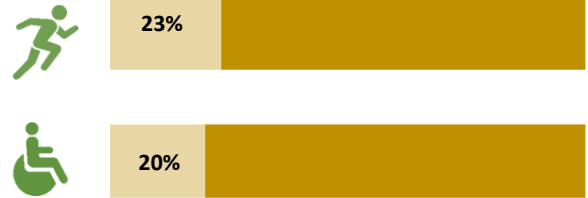
Open Defecation by Education of Household Head (Literate vs. Non-Literate)



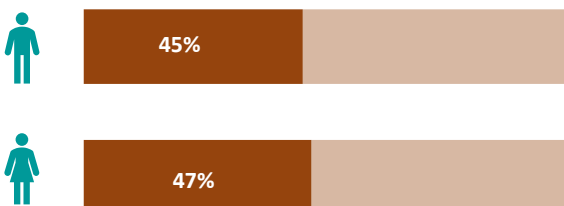
Access to Sanitation Services by Households with Persons Living with Disabilities



Open Defecation by Households with Persons Living with Disabilities



Access to Sanitation Services by Gender of Head of Household

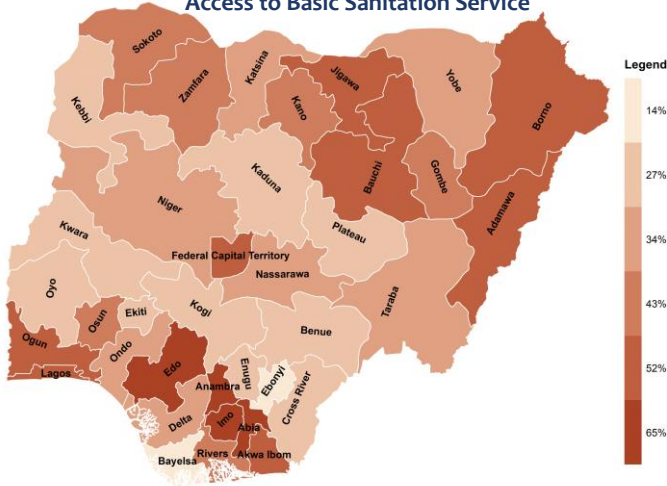


Open Defecation by Gender of Head of Household

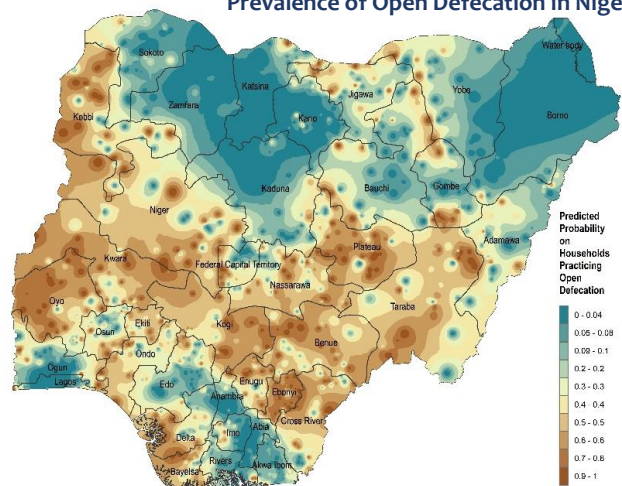


Equity in Access to Sanitation Services

Access to Basic Sanitation Service

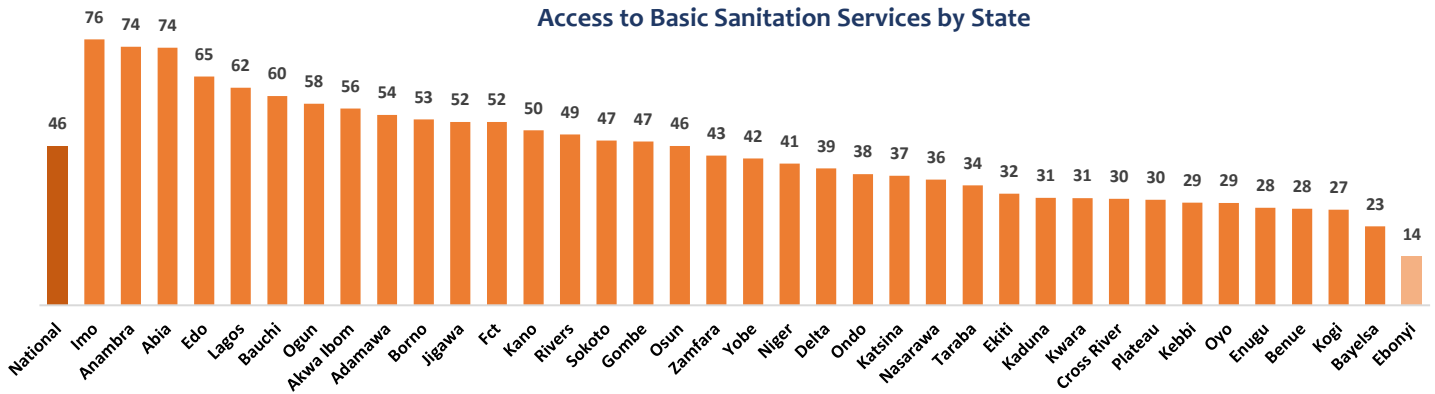


Prevalence of Open Defecation in Nigeria

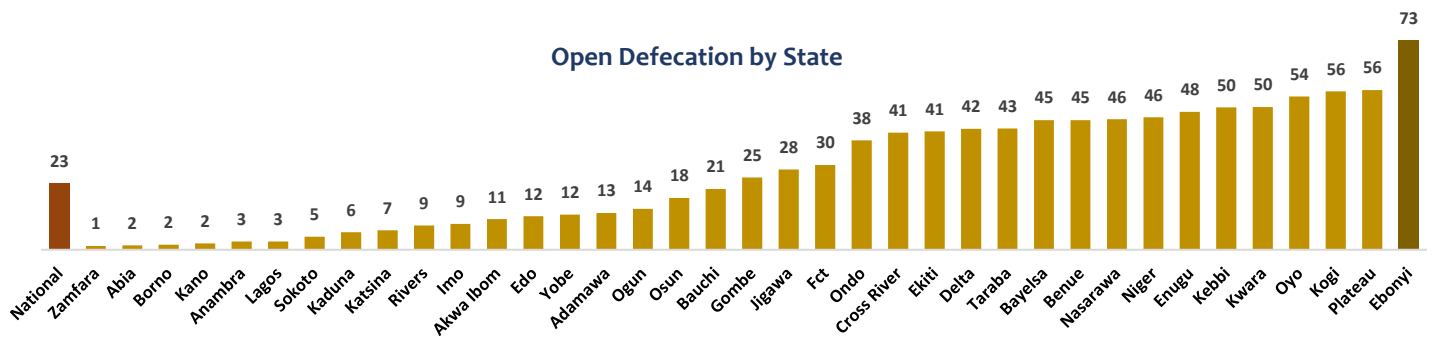


Access to Sanitation Services and Open Defecation by State

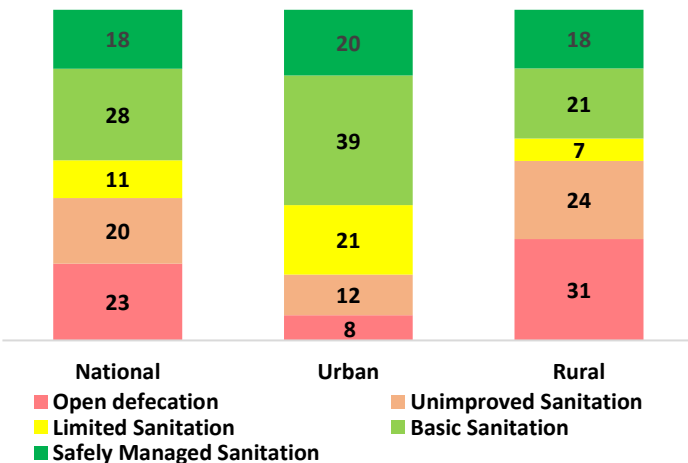
Access to Basic Sanitation Services by State



Open Defecation by State



Sanitation Service Ladder



Notes:

Based on WHO/UNICEF JMP definitions.

- **Safely Managed Services** are improved facilities which are not shared with other households and where excretes are safely emptied and treated
- **Basic Sanitation Services** are improved facilities which are not shared with other households
- **Limited Sanitation Services** are improved facilities shared by two or more households
- **Unimproved Sanitation Services** are pit latrines without a slab or platform, hanging latrines or buckets latrines
- **Open Defecation** is disposal of human feces in fields, forests, bushes, open bodies of water, beaches, and other open space

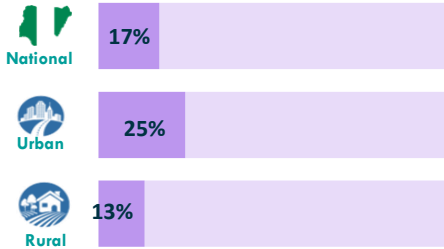
Hygiene Practices in Nigeria

About 17% of household members have access to basic hygiene services, this is a marginal increase of one percentage point when compared with 2019 WASHNORM figures.

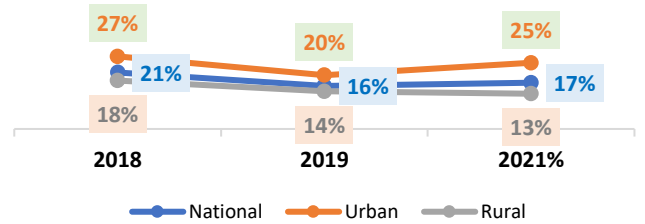


17%

Households have access to basic hygiene services

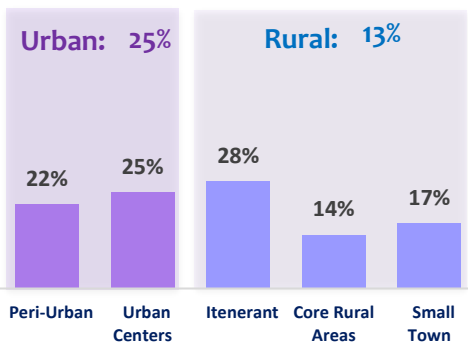


Trends in the use of Basic Hygiene Services by Area of Residence

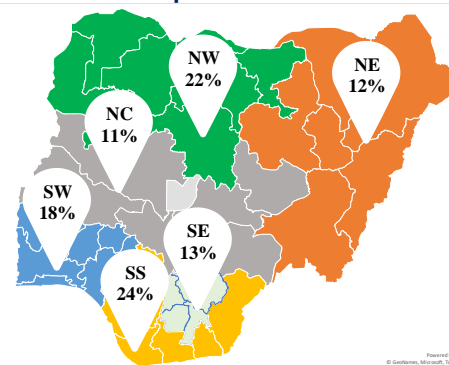


Equity in Access to Hygiene Services

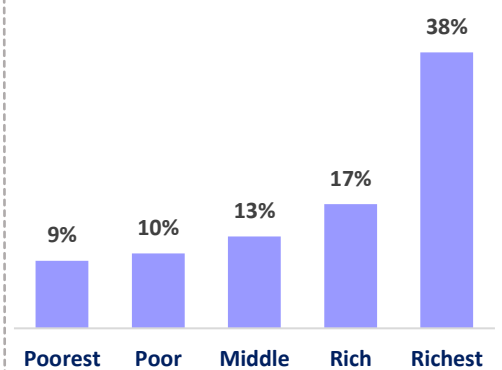
Access to Basic Hygiene Services by Area of Residence



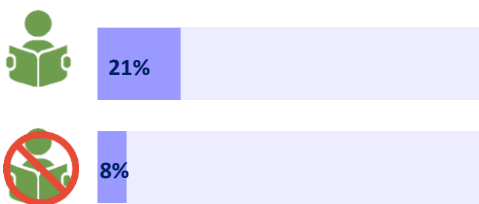
Access to Basic Hygiene Services by Geopolitical Zones



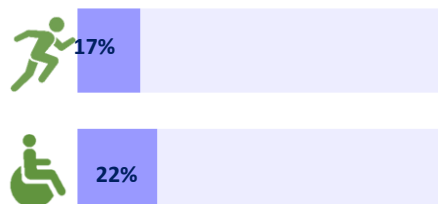
Access to Basic Hygiene Services by Wealth Quintiles



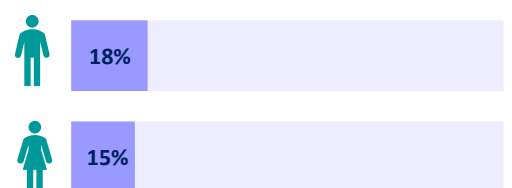
Access to Basic Hygiene Services by Education of Household Head (Literate vs non-Literate)



Access to Basic Hygiene Services by Households with Persons Living with Disabilities



Access to Basic Hygiene Services by Gender of Head of Household



Knowledge and Practice of Handwashing



99%

Heads of households have knowledge of at least 2 critical times for handwashing

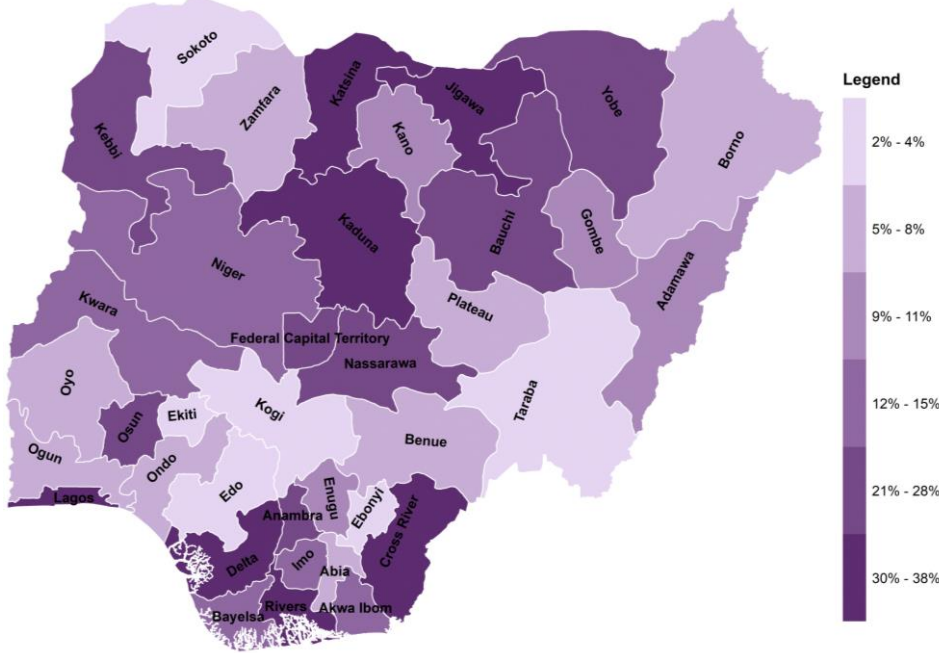


8%

Heads of households demonstrated proper handwashing with water and soap under running water

Access to Basic Hygiene Services by State

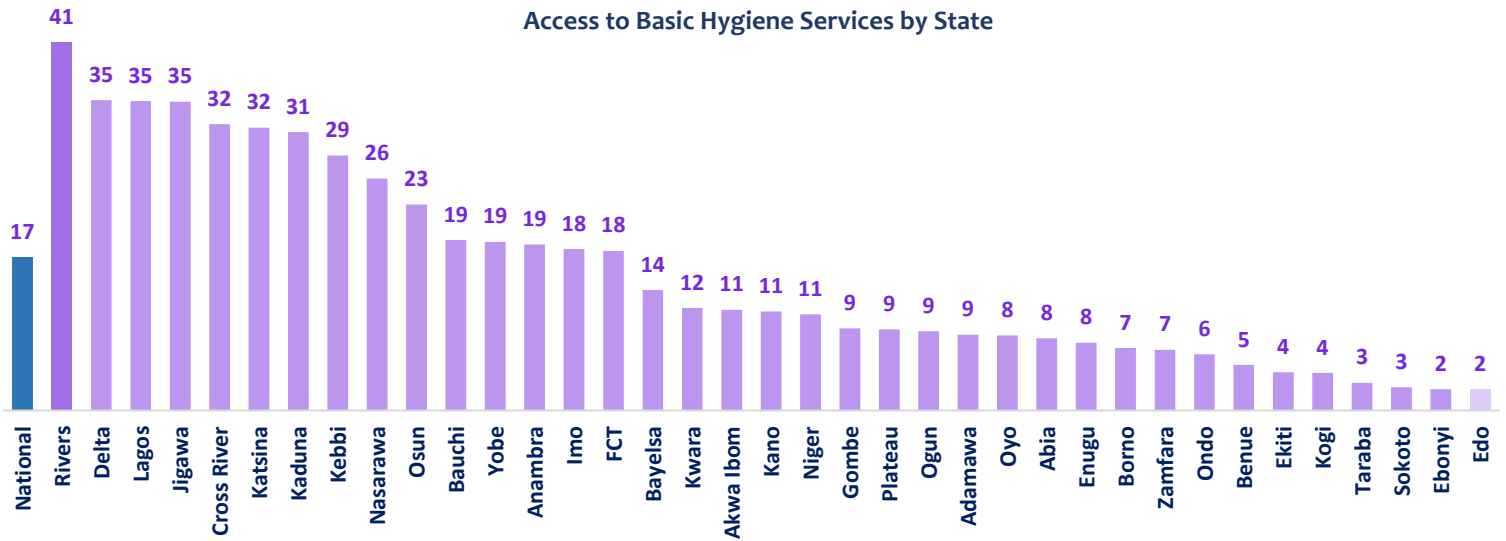
Area Value Map for Access to Basic Hygiene Services in Nigeria



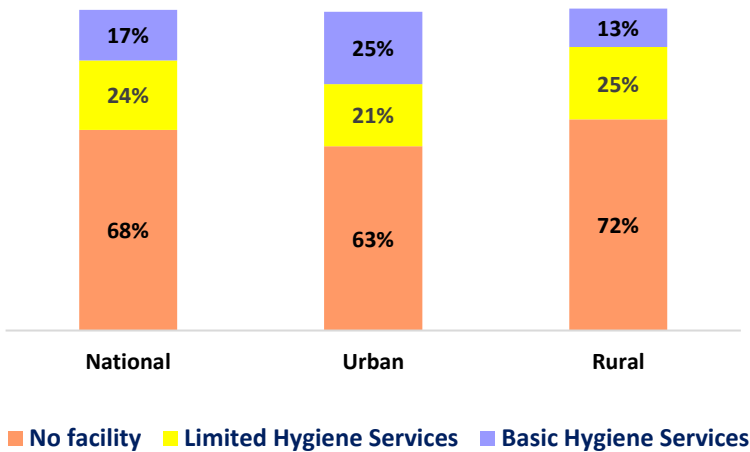
Distribution of basic hygiene services across the country. Dark purple areas represent a high level of service, while light purple areas represent low level of service

People in Rivers State (41%) are 20 times more likely to have access to basic hygiene services than people in Edo State at 2%.

Access to Basic Hygiene Services by State



Hygiene Service Ladder



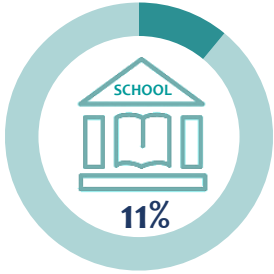
Notes:

Based on WHO/UNICEF JMP definitions.

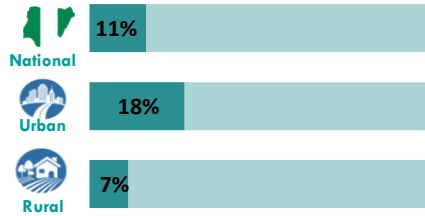
- Basic Hygiene Services** where handwashing facility is available on premises and with soap and water
- Limited Hygiene Services** where handwashing facility is available on premises without soap and water
- No Facility** where there is no handwashing facility on premises

WASH in Schools

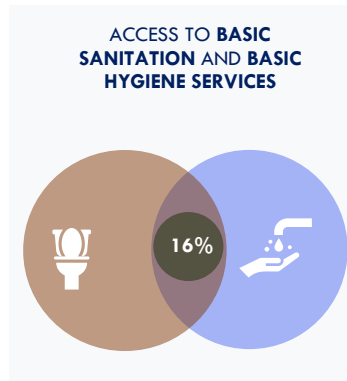
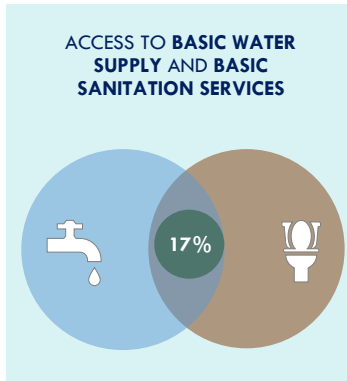
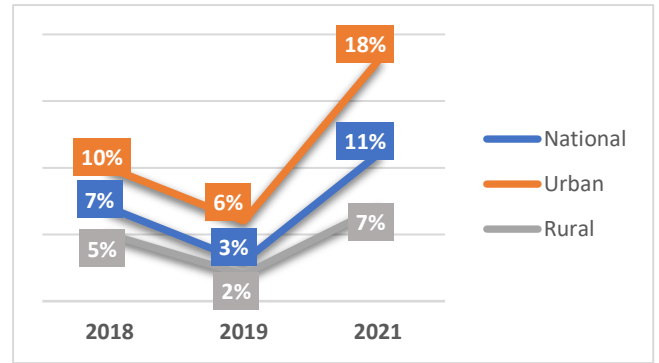
Only 11% of schools have basic water supply, sanitation, and hygiene services. At 18%, schools in urban areas are about twice as likely to have access to basic water supply, sanitation, and hygiene services than schools in the rural areas at 7%.



Schools have access to basic water supply, basic sanitation, and hygiene services



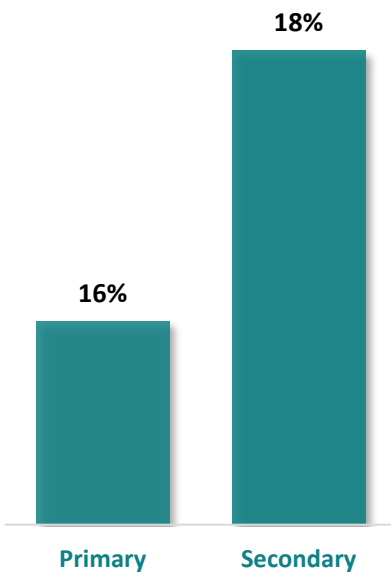
Trends in Access to Basic WASH Services in Schools



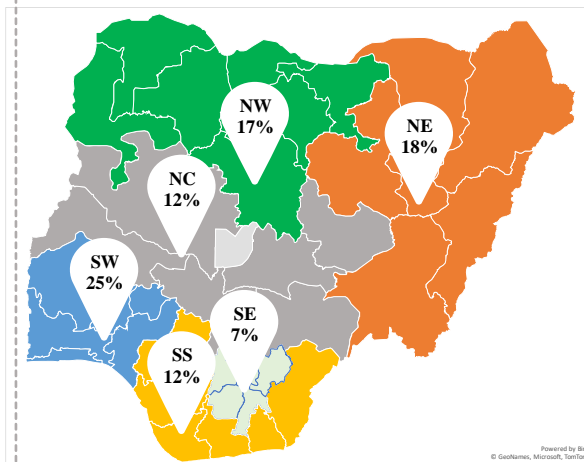
Disparities in Access to Water and Sanitation Services in Schools

Primary schools are more disadvantaged in access to basic water and sanitation services than secondary schools. Schools in the South-south and North-west are more likely to have access to basic water and sanitation services compare to other regions of the country.

Access to Basic Water and Sanitation Services in Schools by Type



Access to Basic Water and Sanitation Services in Schools by Geopolitical Zones



3.4%

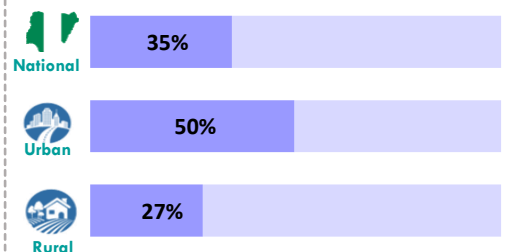
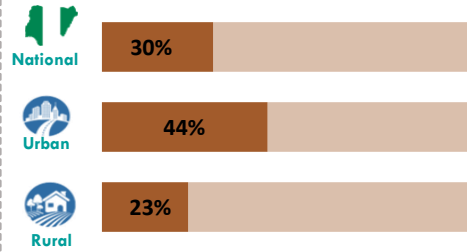
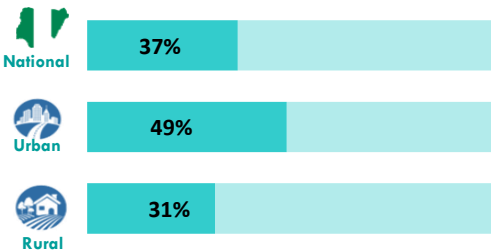
Schools have basic gender-sensitive sanitation and hygiene services.



These are schools with useable improved toilet/latrines with separate blocks for males and females, available at all times during school days and has facilities for handwashing and menstrual hygiene management

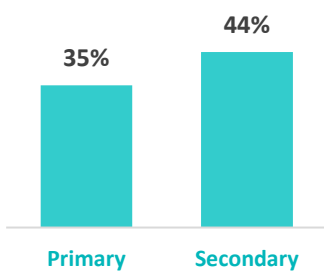
Access to Water Supply, Sanitation and Hygiene Services in Schools

Less than half of all schools in Nigeria have access to basic water supply, sanitation, and hygiene services. Schools in urban areas are more likely to have access to basic WASH services than schools in the rural areas, while secondary schools have more access than primary schools.

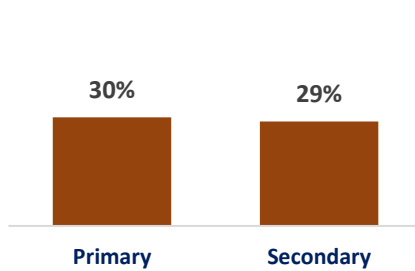


Disparities in Access to Water Supply, Sanitation and Hygiene

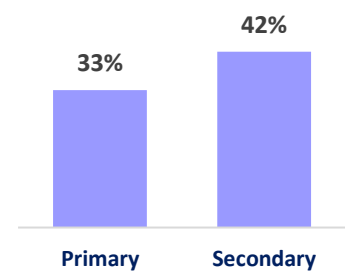
Access to Basic Water Supply Services in Schools by Type



Access to Basic Sanitation Services in Schools by Type



Access to Basic Hygiene Services in Schools by Type



19%

Schools have basic water supply services that are accessible to pupils/students living with disabilities



8%

Schools have girls' toilet compartments with provisions for menstrual hygiene management

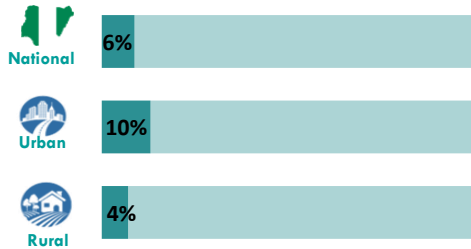
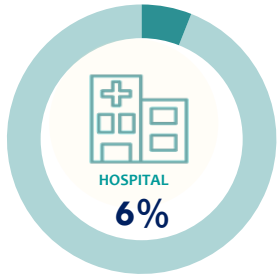


89%

Schools dispose of their solid waste properly

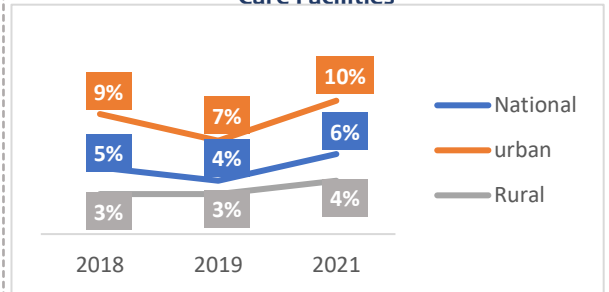
WASH in Health Facilities

Only 6% of health care facilities have basic water supply, sanitation, and hygiene services. At 10%, health care facilities in urban areas are twice as likely to have access to basic water supply, sanitation, and hygiene services than health care facilities in the rural areas.

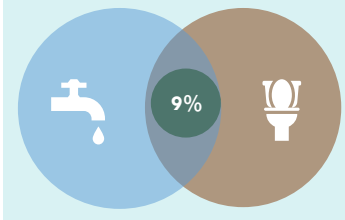


Health care facilities have access to basic water supply sanitation and hygiene services

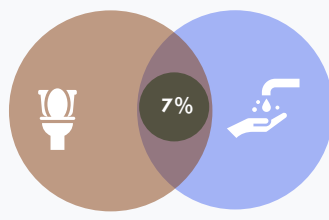
Trends in Access to Basic WASH Services in Health Care Facilities



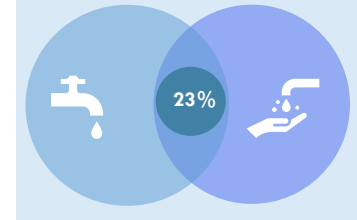
ACCESS TO BASIC WATER SUPPLY AND BASIC SANITATION SERVICES



ACCESS TO BASIC SANITATION AND BASIC HYGIENE SERVICES



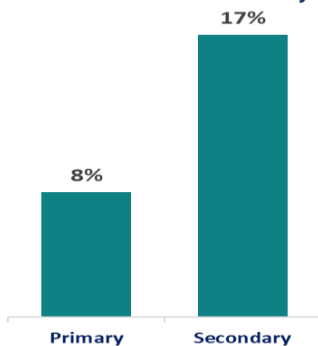
ACCESS TO BASIC WATER SUPPLY AND BASIC HYGIENE SERVICES



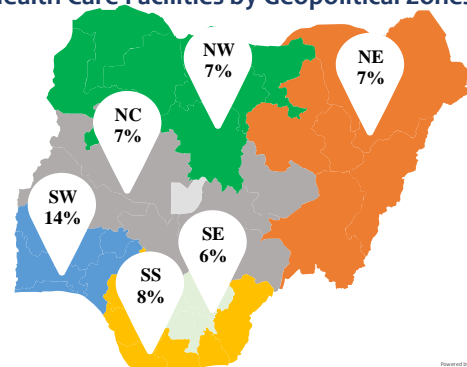
Disparities in Access to Water and Sanitation Services in Health Care Facilities

Primary Health Facilities are more disadvantaged in access to basic water and sanitation services than secondary facilities. Access to basic water and sanitation services is generally low across all geopolitical zones.

Access to Basic Water and Sanitation Services in Health Facilities by Type



Access to Basic Water and Sanitation Services in Health Care Facilities by Geopolitical Zones



Prevalence of Diarrhoeal Disease



Households had at least one member who suffered diarrhoea in the past 2 weeks preceding the survey

74%



of household members who suffered diarrhoea are children under five years old

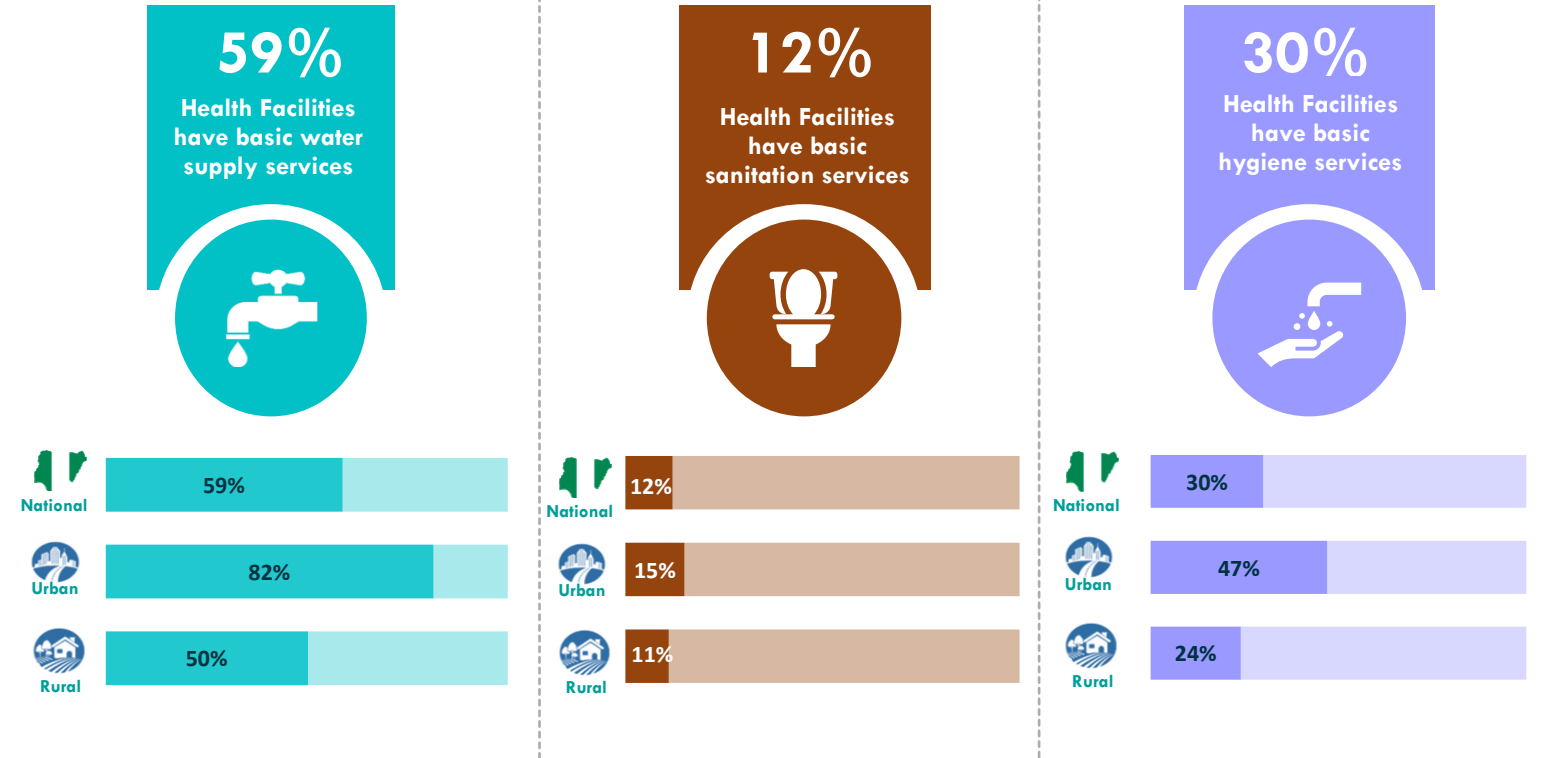
35%



of Hospital records of all sick reports are diarrhoea cases

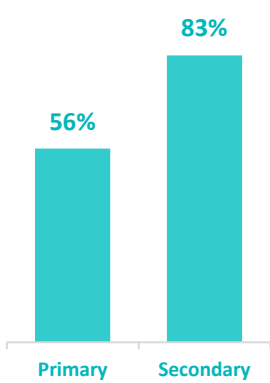
Access to Water Supply, Sanitation and Hygiene Services in Health Facilities

More than half of health facilities in Nigeria have basic water supply services, 1 in 10 (12%) health facilities have access to basic sanitation services and nearly one-third of health facilities have access to basic hygiene services. Health facilities in rural areas are more disadvantaged in access to WASH Services than their counterparts in urban areas.

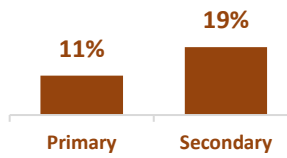


WASH in Health Care Facilities

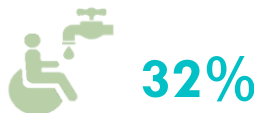
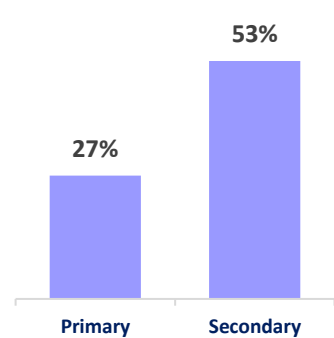
Access to Basic Water Supply Services in Health Facilities by Type



Access to Basic Sanitation Services in Health Facilities by Type



Access to Basic Hygiene Services in Health Facilities by Type



32%

Health facilities have improved water supply facility within the premises that are accessible to persons living with disabilities



23%

Health facilities have improved sanitation facility that are accessible to persons living with disabilities



37%

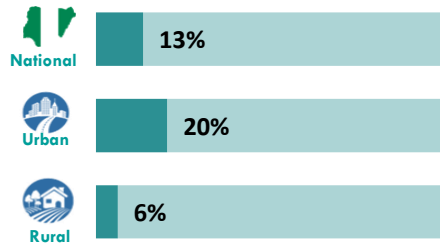
Health facilities have their garbage/waste separated into at least three labelled bins in the consultation areas and safely disposed

WASH in Markets and Motor Parks

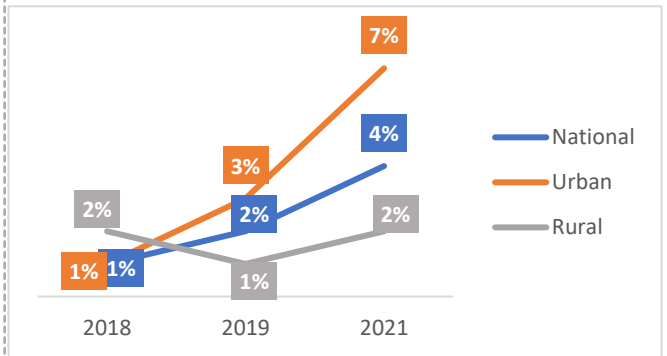
Only 4% of markets and motor parks have basic water supply, sanitation, and services. At 7%, markets and motor parks in urban areas are four times more likely to have access to basic water supply, sanitation, and hygiene services than those in rural areas.



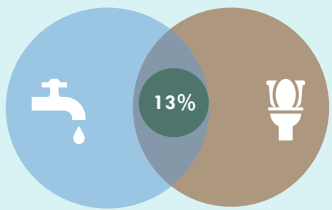
Markets/Motor parks have access to basic water supply sanitation and hygiene



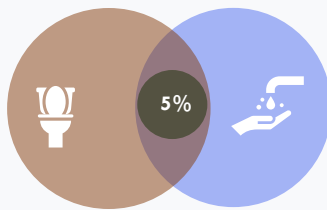
Trends in Access to Basic WASH Services in Markets/Motor Parks



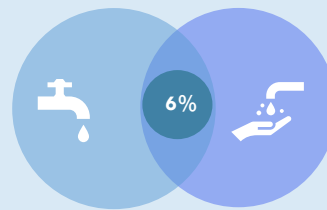
ACCESS TO BASIC WATER SUPPLY AND BASIC SANITATION SERVICES



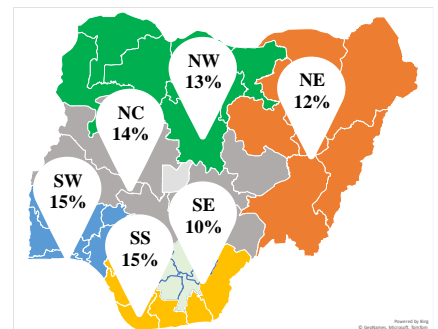
ACCESS TO BASIC SANITATION AND BASIC HYGIENE SERVICES



ACCESS TO BASIC WATER SUPPLY AND BASIC HYGIENE SERVICES



Access to Basic Water and Sanitation Services in Markets/Motor Parks by Geopolitical Zones



Access to Water Supply, Sanitation and Hygiene Services in Markets/Motor Parks

About one-third of the markets and motor parks in Nigeria have basic water supply services, 1 in 5 have access to basic sanitation services and only 8 per cent have access to basic hygiene services. Markets and Motor parks in rural areas are more disadvantaged in access to WASH services than their counterparts in urban areas.

33%

Markets/Motor Parks have basic water supply services



20%

Markets/Motor Parks have basic sanitation services



8%

Markets/Motor Parks have basic hygiene services



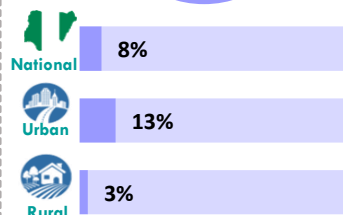
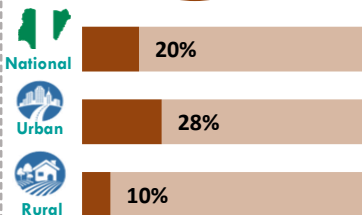
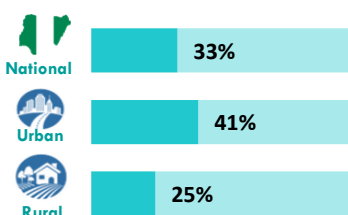
20%

Markets and Motor Parks have basic water supply services that are accessible to persons living with disabilities



20%

Markets and Motor Parks have latrines that are cleaned at least once a day



Household Expenditure on WASH

Households in Nigeria spent approximately ₦3.4 trillion or \$8.5 billion annually, on water, sanitation, and hygiene services in 2019 and 2020 (the two years recall period covered by the WASH Account Survey).

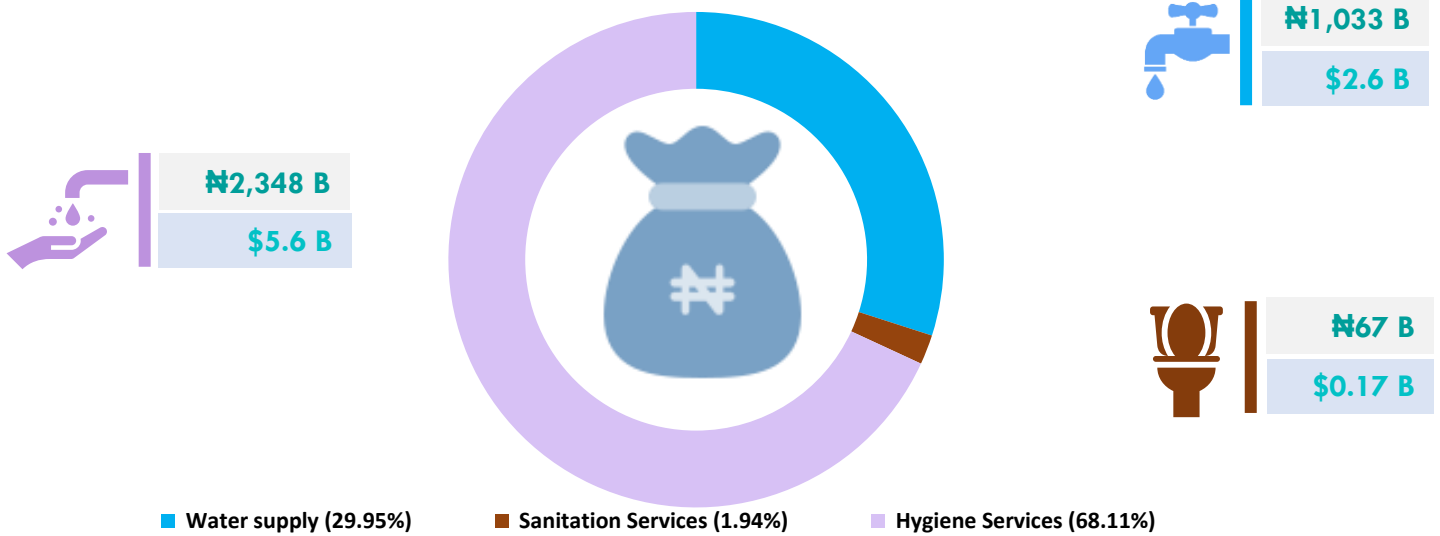


₦3.4 Trillion
\$8.5 Billion
is spent by households on water, sanitation, and hygiene services annually

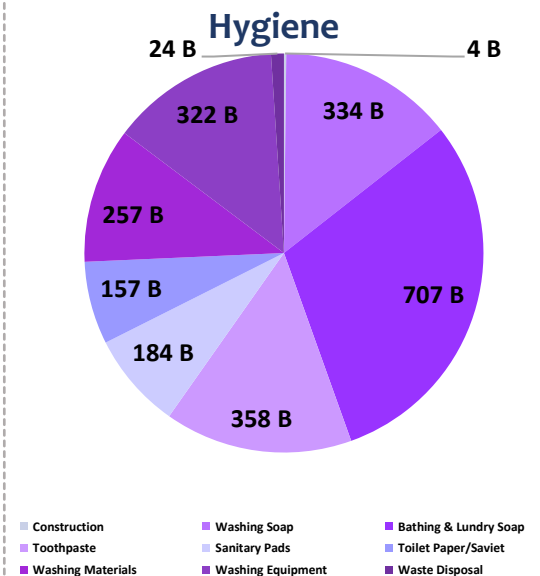
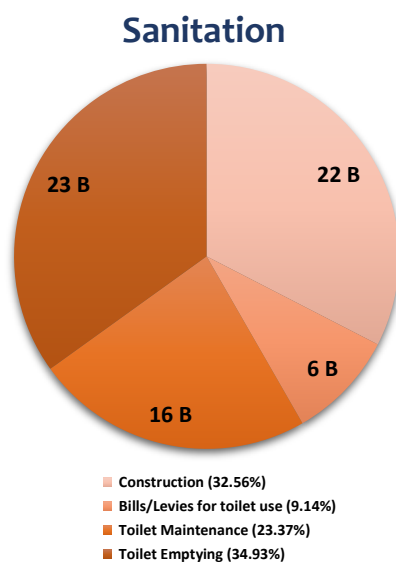
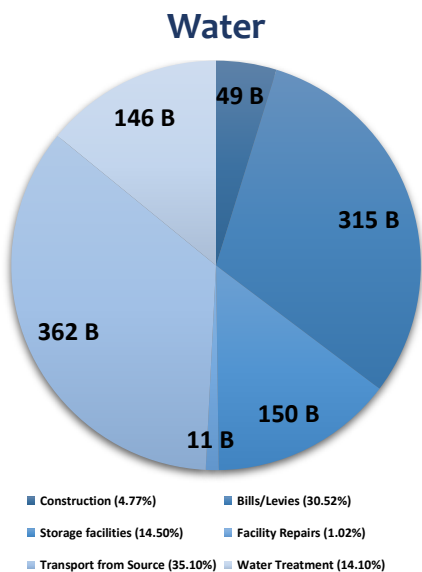
* At a working exchange rate of ₦400 to \$1

Cost Per Household	₦81,028
	\$202
Cost Per person	₦16,710
	\$42

Breakdown by Sector



Breakdown by Service Type (in Naira)





**Federal Ministry of
Water Resources**

unicef 
for every child