



# National Outcome routine mapping of water, sanitation and hygiene services levels Nigeria

## Summary of Survey Findings 2019





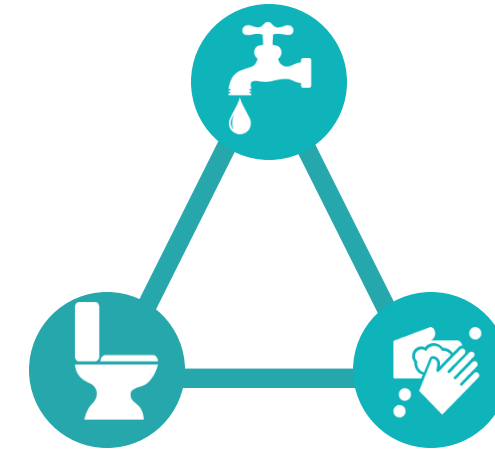
# Overview

Inadequate access to quality water, sanitation and hygiene (WASH) services continues to plague Nigeria, contributing to a range of negative health, socioeconomic and environmental consequences. Reliable, comprehensive and up-to-date WASH data is key to guide decisions of policymakers and practitioners to adequately address the complex and multidimensional WASH issues the country is facing, as well as monitor the ambitious WASH goals of the SDGs.

Launched in 2018, the annual WASH National Outcome Routine Mapping (WASH-NORM) is a national assessment of the status of the WASH services which seeks to cover the data gaps in the sector. It integrates users' perception of service levels with assessments of WASH facilities to produce a comprehensive and in-depth analysis of national WASH coverage. The WASH-NORM collects a vast amount of data that can be used to track progress towards the attainment of national goals as captured in the National Open Defecation Free Roadmap, the Partnership for Expanded Water, Sanitation and Hygiene framework and the WASH Sector Revitalization Action Plan. The survey also effectively disaggregates data across different geopolitical zones, area of residence and demographic groups which can be used to target unserved and under-served people with appropriate policies and adequate resources that promote equity in access to WASH. The study also contains information on topics such as quality, dependability and adequacy of WASH services, which are of relevance to ensuring full coverage and sustainable access.

This is the second round of the WASH-NORM survey. Under the overall leadership of the Federal Ministry of Water Resources, with technical and financial support from UNICEF, the World Bank and African Development Bank, data collection for NORM II was successfully carried out by National Bureau of Statistics. The survey was carried out in all the 36 states of the federation and federal capital territory, Abuja. This survey broadly focuses on two components: household based assessments of WASH levels and facility-based assessments of WASH infrastructure. Among other enhancements to the exercise, the incorporation of a household expenditure tool and water quality assessments were introduced as key components of NORM II. The following chart pack summarizes the findings from the survey.

# Key Findings



9%

Have access to basic water, sanitation, hygiene services



70%

Use basic drinking water services



9 liters

Average per capita volume of water per day for the rural population



44%

Use basic sanitation services



46 million

Practice open defecation



16%

Households have access to basic hygiene services



14%

Schools have basic water and sanitation services



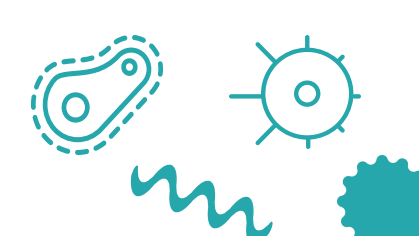
7%

Health facilities have basic water and sanitation services



14%

Markets and Motor Parks have basic water and sanitation services



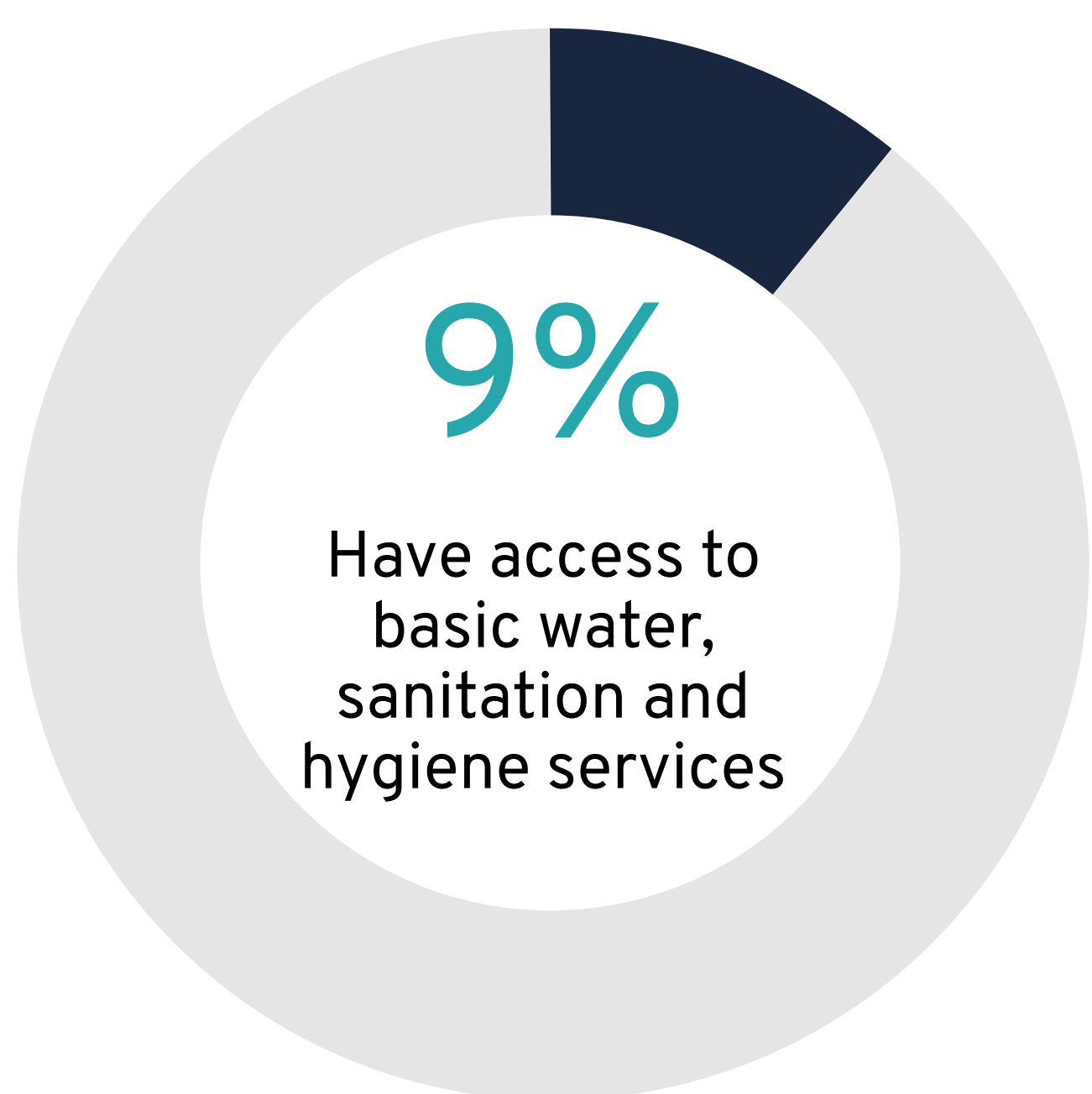
11%

of households had at least one diarrhea case in the past 6 weeks

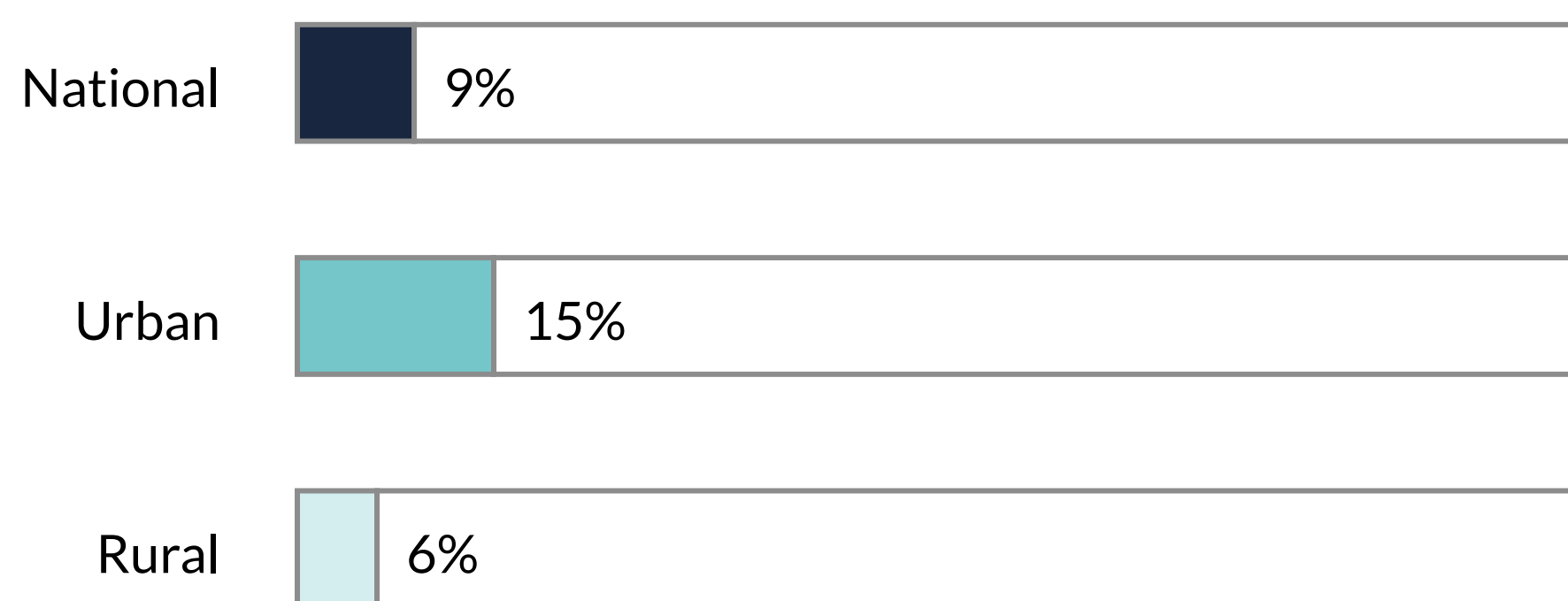
# Access to Basic WASH Services in Nigeria



The overall status of the WASH sector in Nigeria is low. Only 9 per cent of the population have access to complete basic WASH services. Those living in rural areas are two times more disadvantaged than those in urban areas.



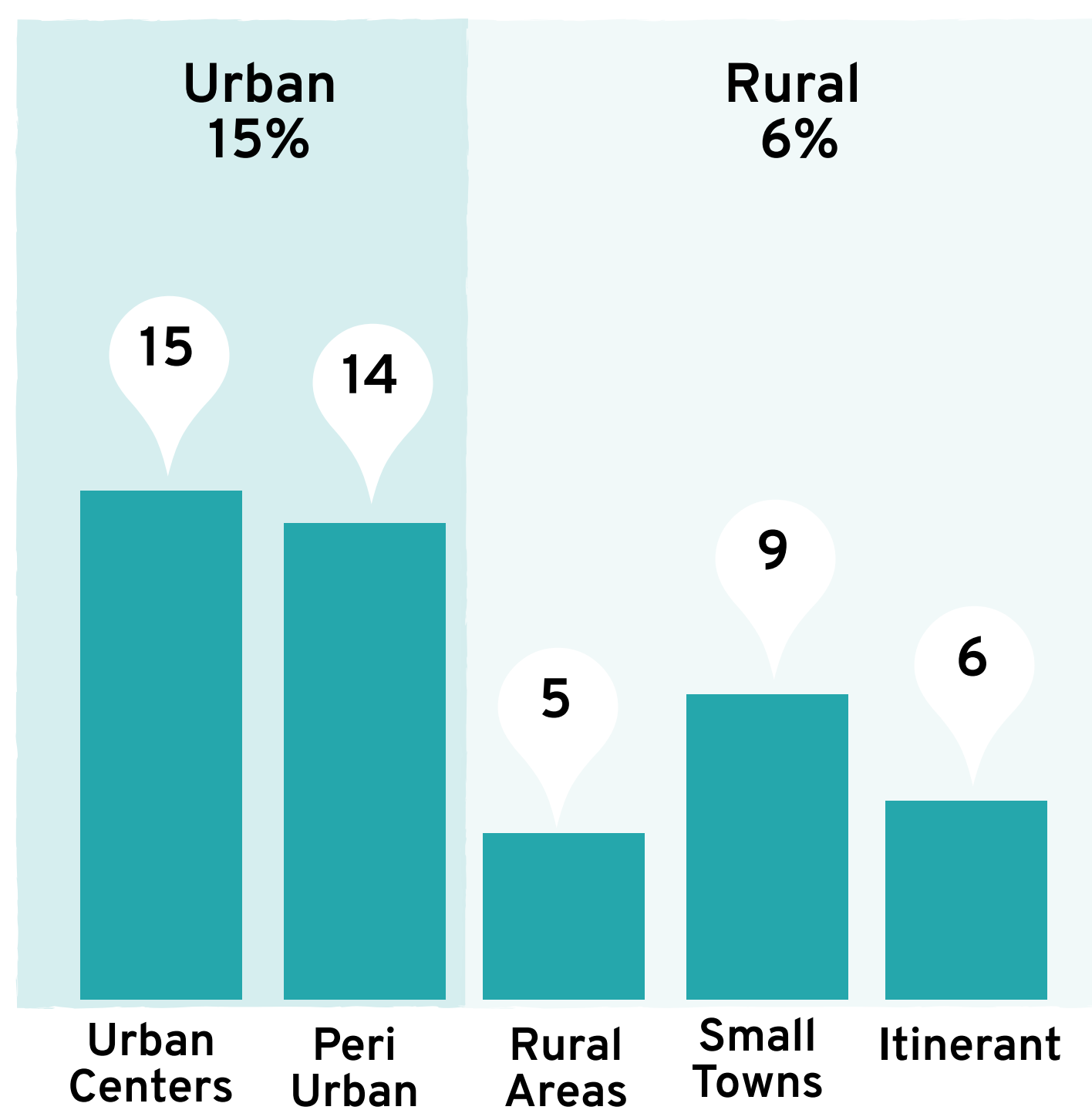
## Access to Basic WASH Services by Area of Residence



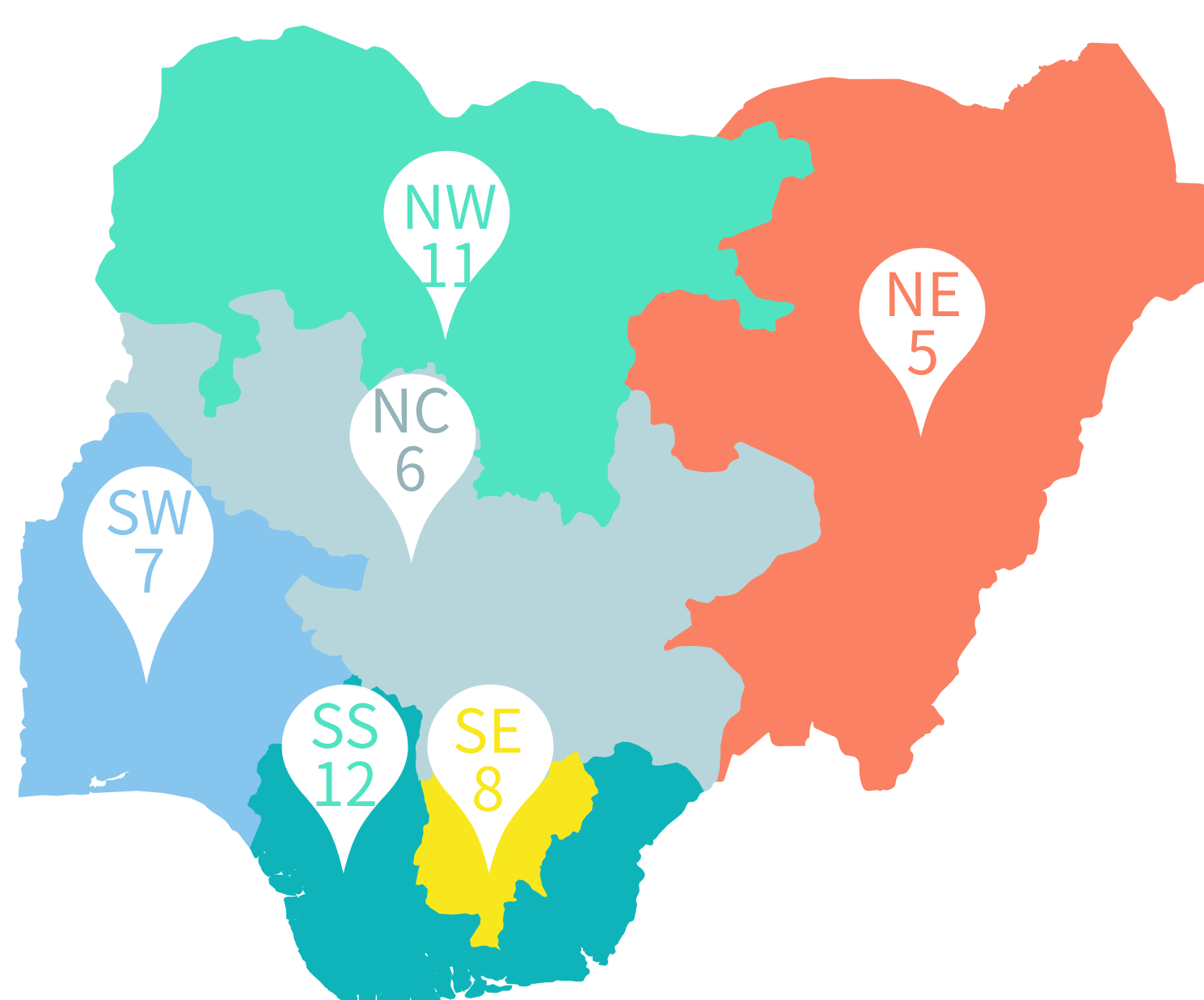
## Equity in Access to Basic WASH Services

Disparities were observed in the use of combined 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 more than eight times more likely to access basic WASH services than the poorest households.

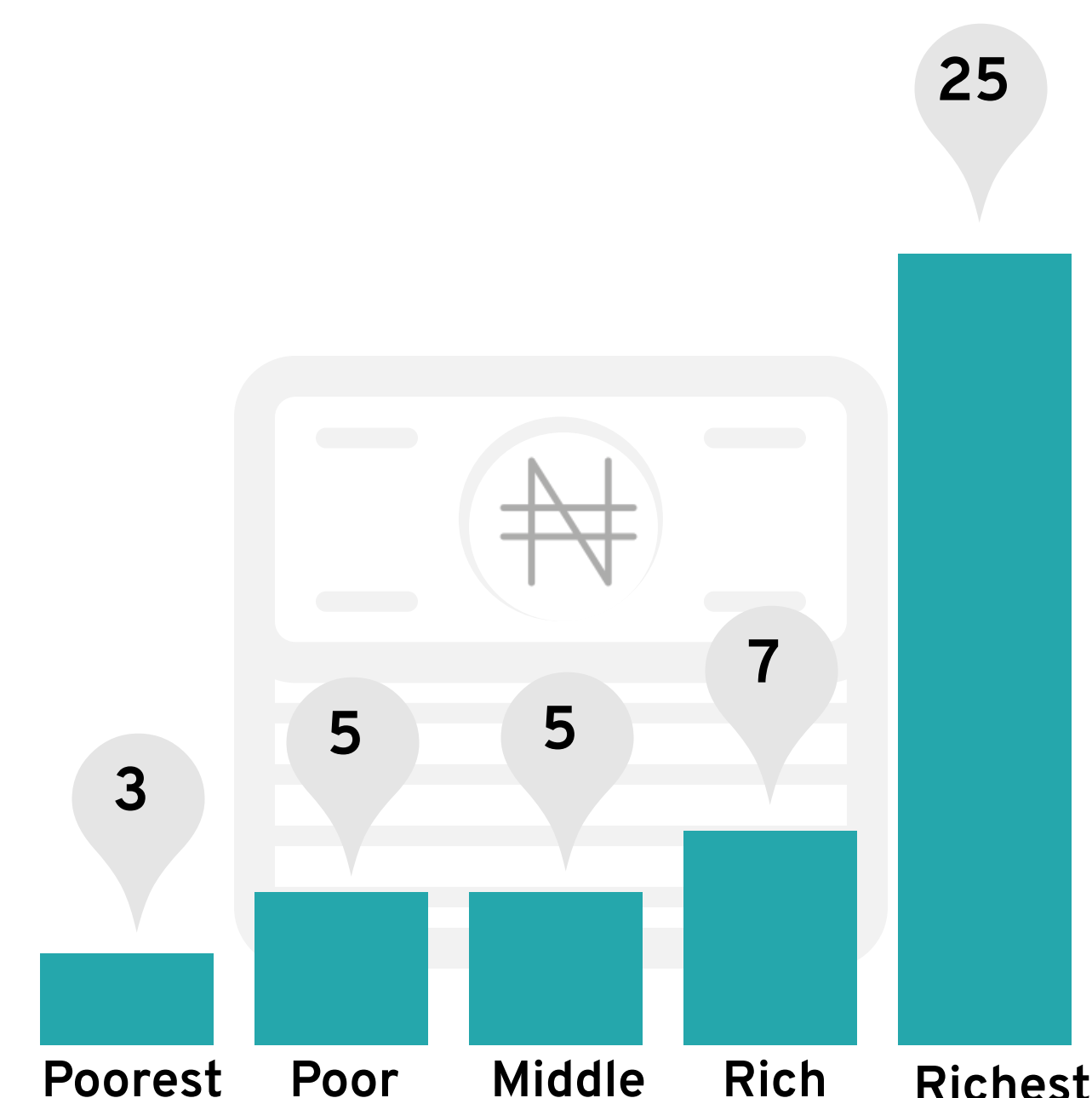
### Access to Basic WASH Services by Area of Residence



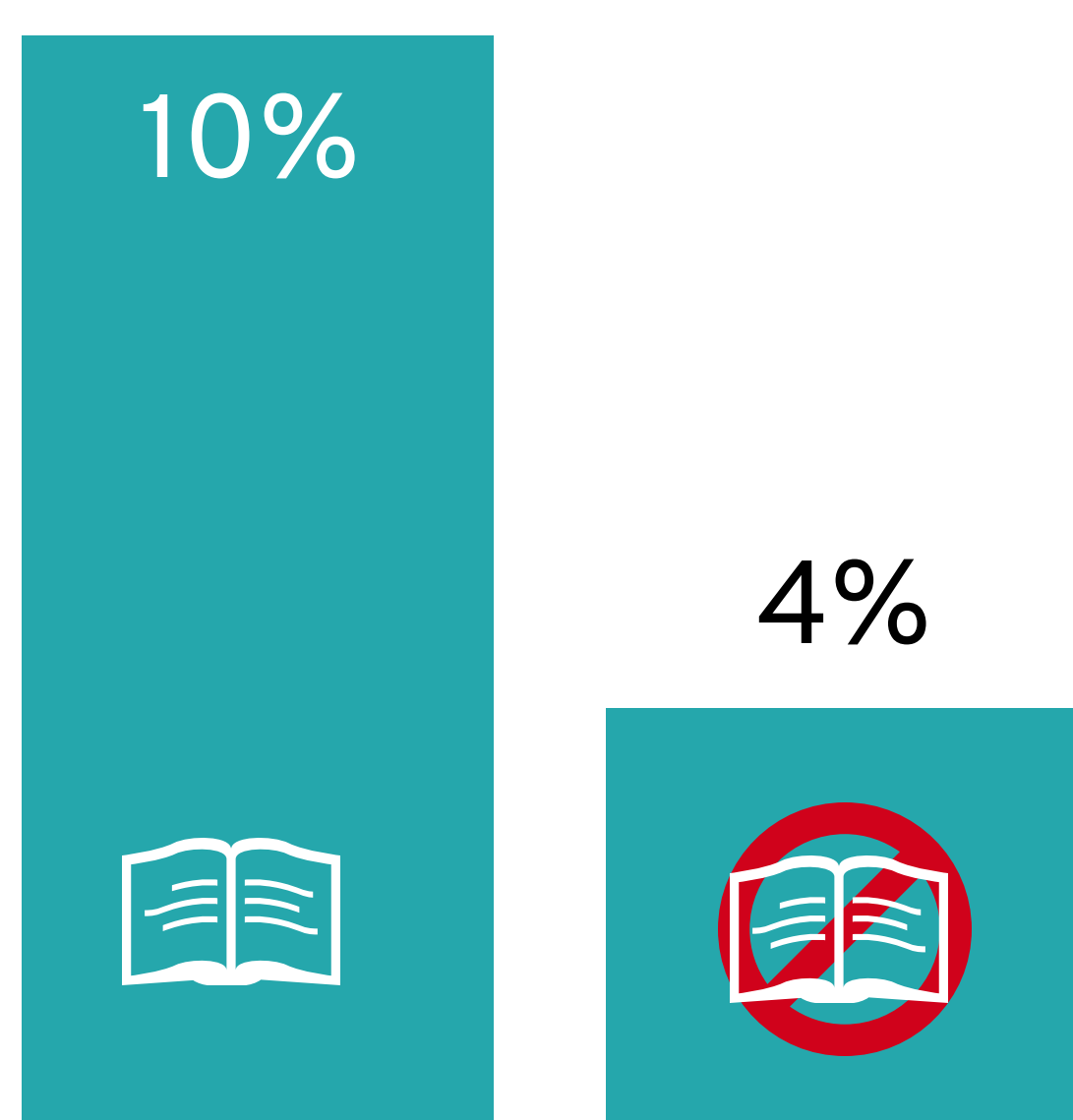
### Access to Basic WASH Services by Geopolitical Zones



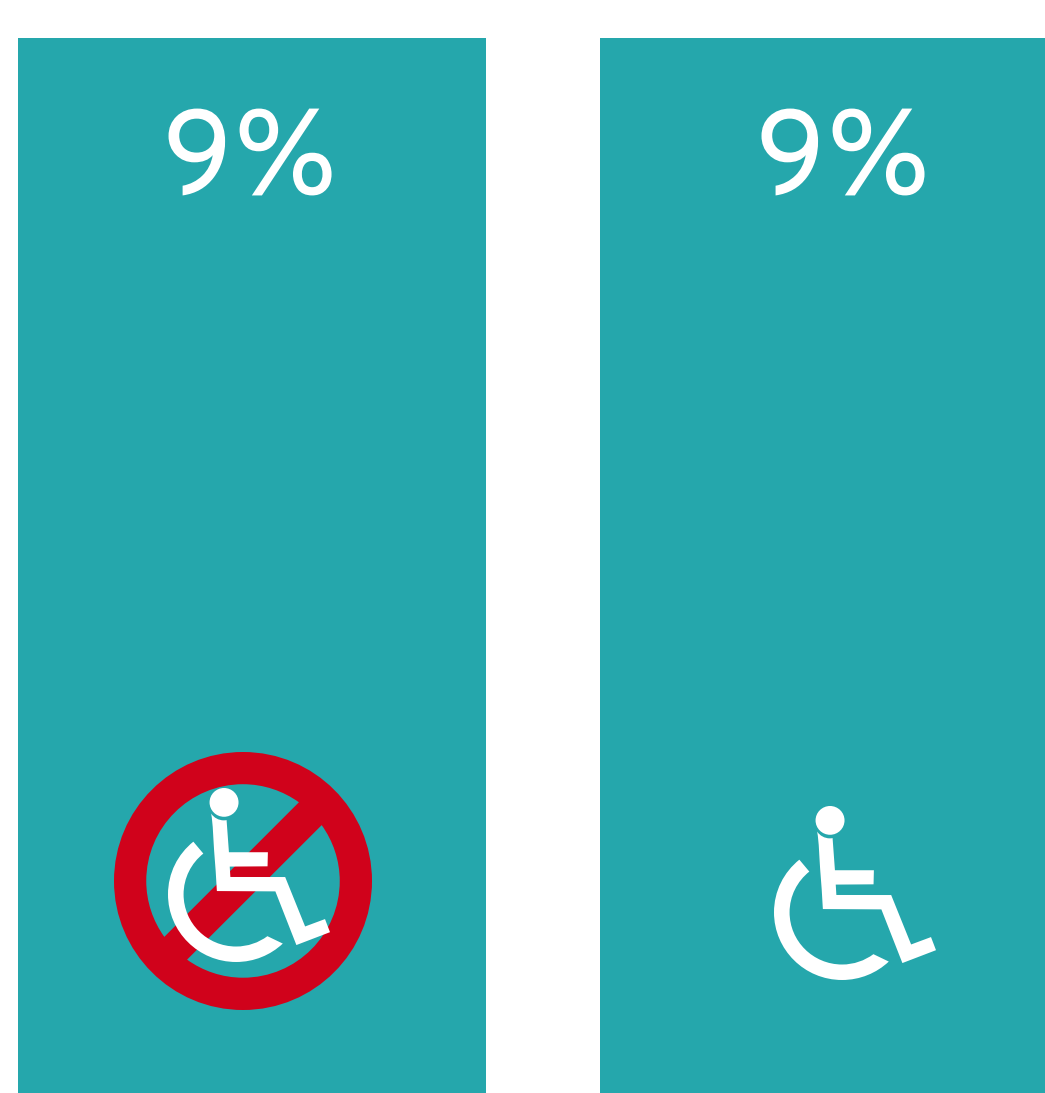
### Access to Basic WASH Services by Wealth Quintiles



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



### Access to Basic WASH Services by Households with Persons Living with Disabilities

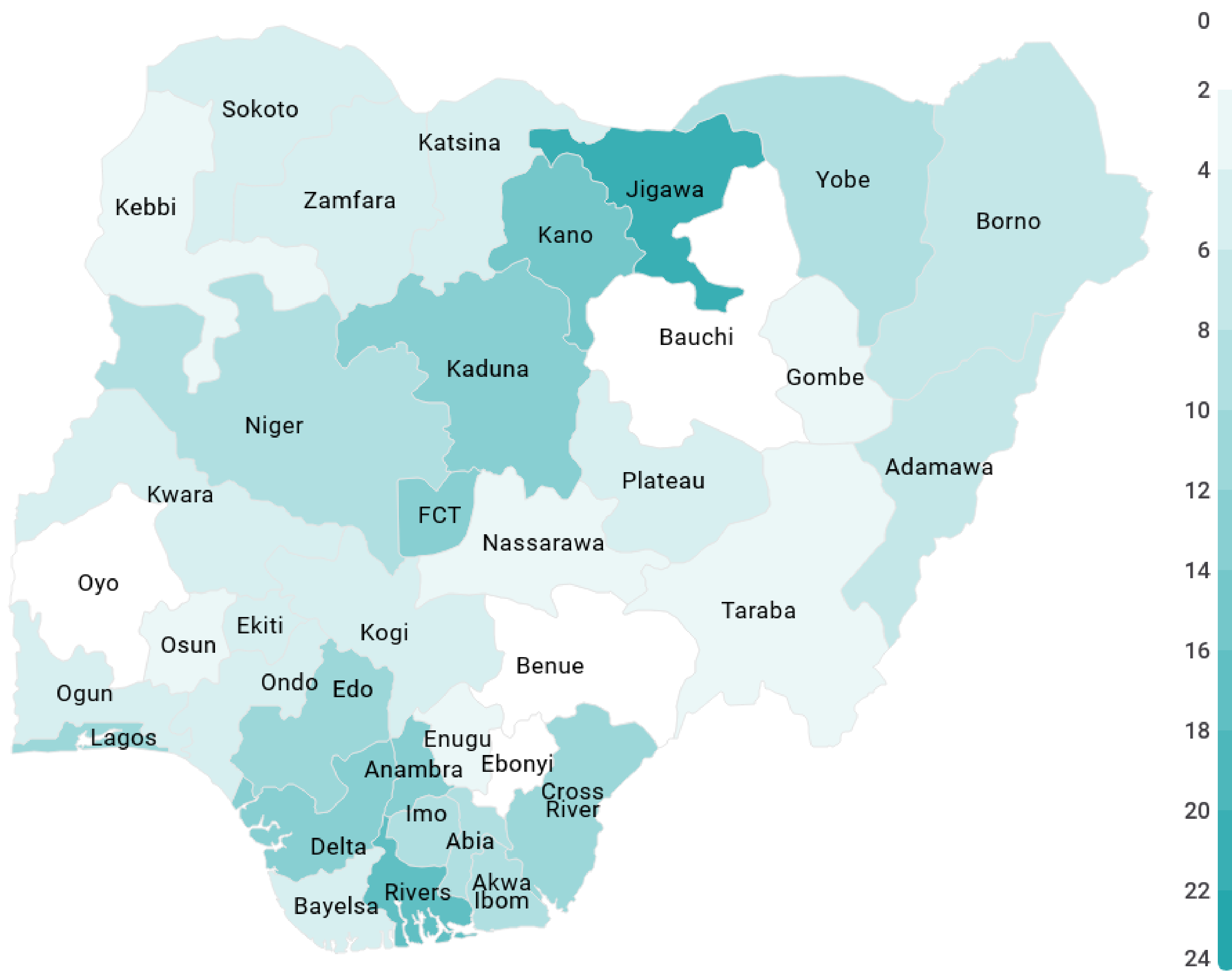


### Access to Basic WASH Services by Gender of Head of Household



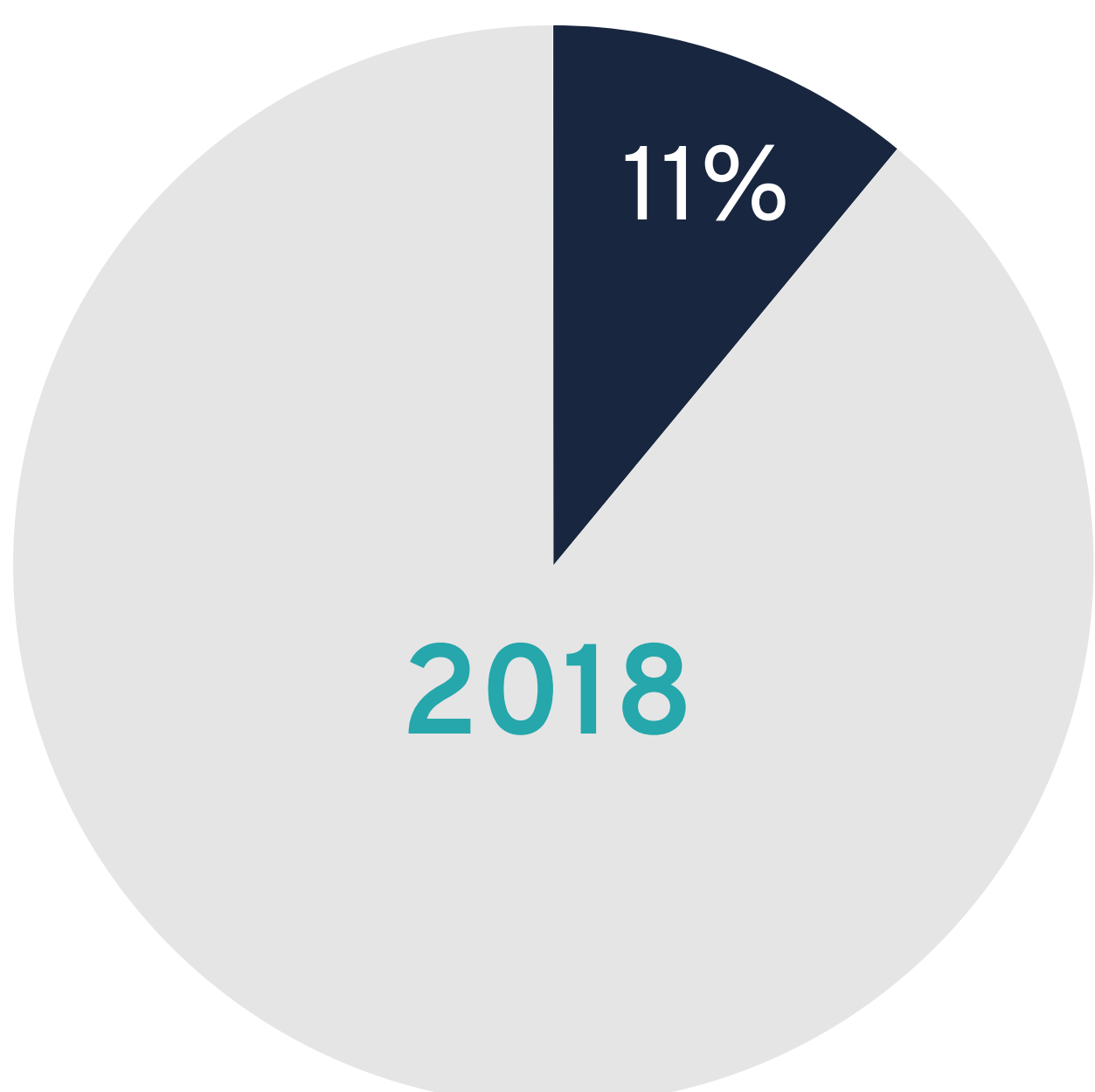
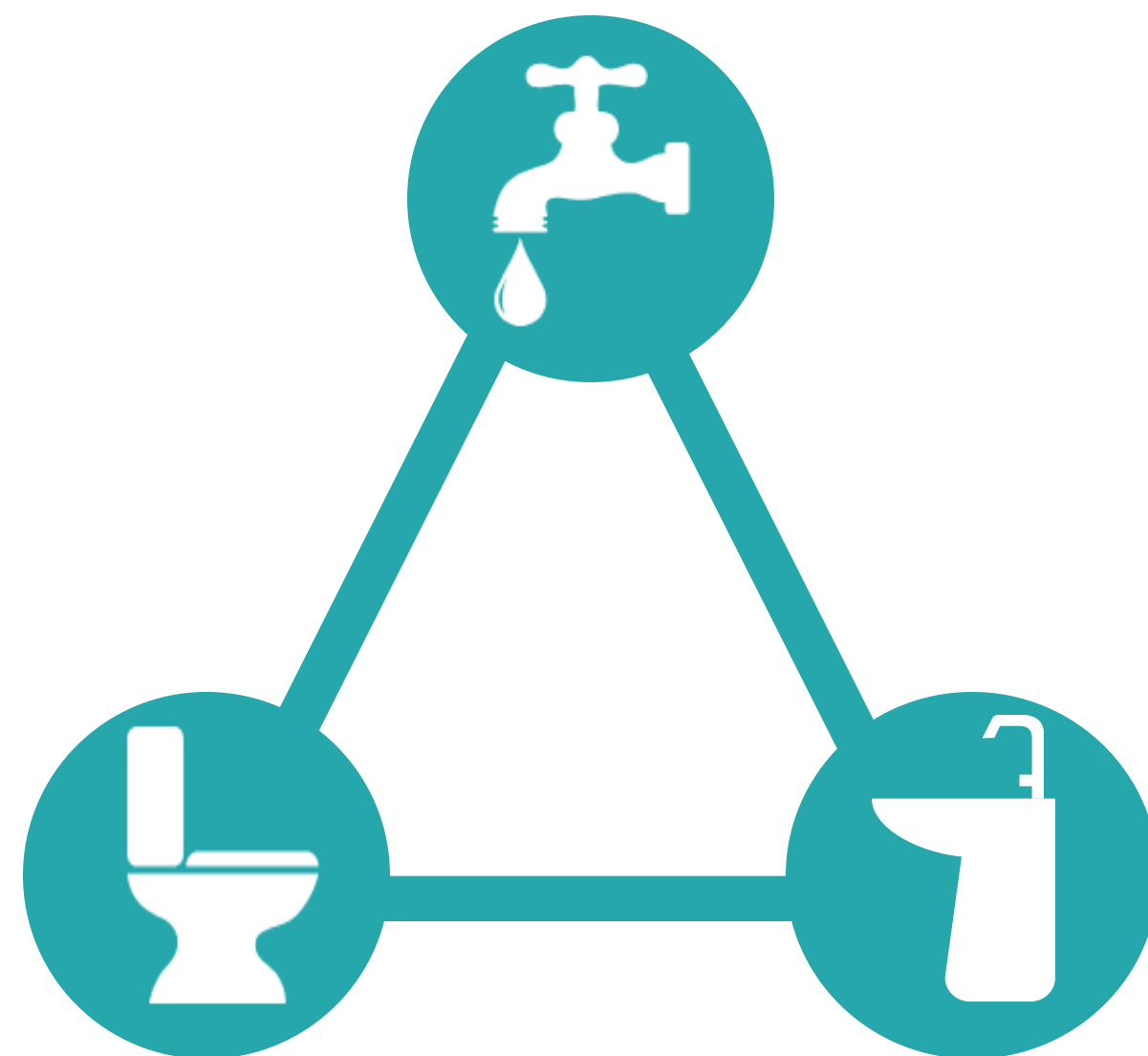


## Area Value Map of Nigeria Showing Access to Basic WASH Services across States

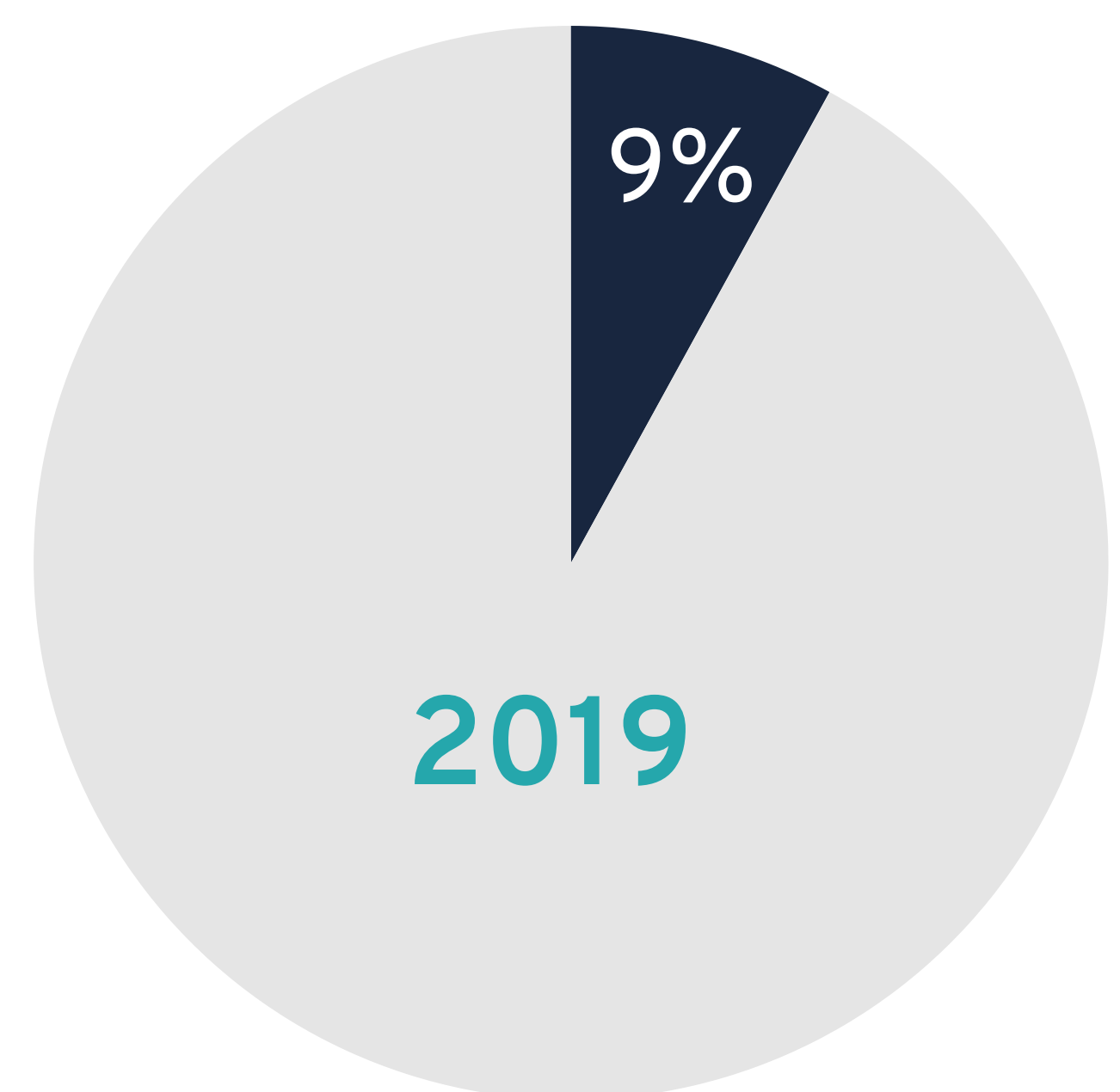
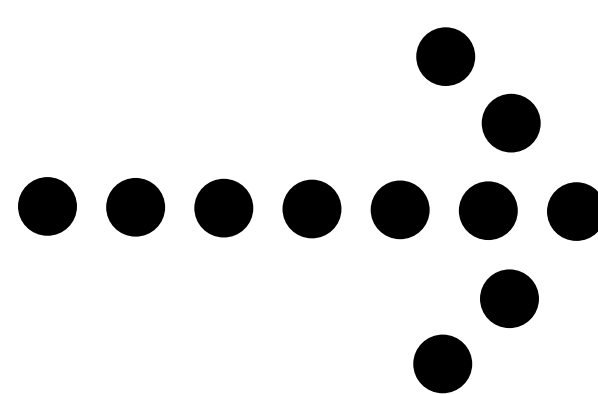


## Trends in Access to Basic WASH Services

Fewer people have access to basic water, sanitation and hygiene services in 2019 than in 2018.



21 million people with access



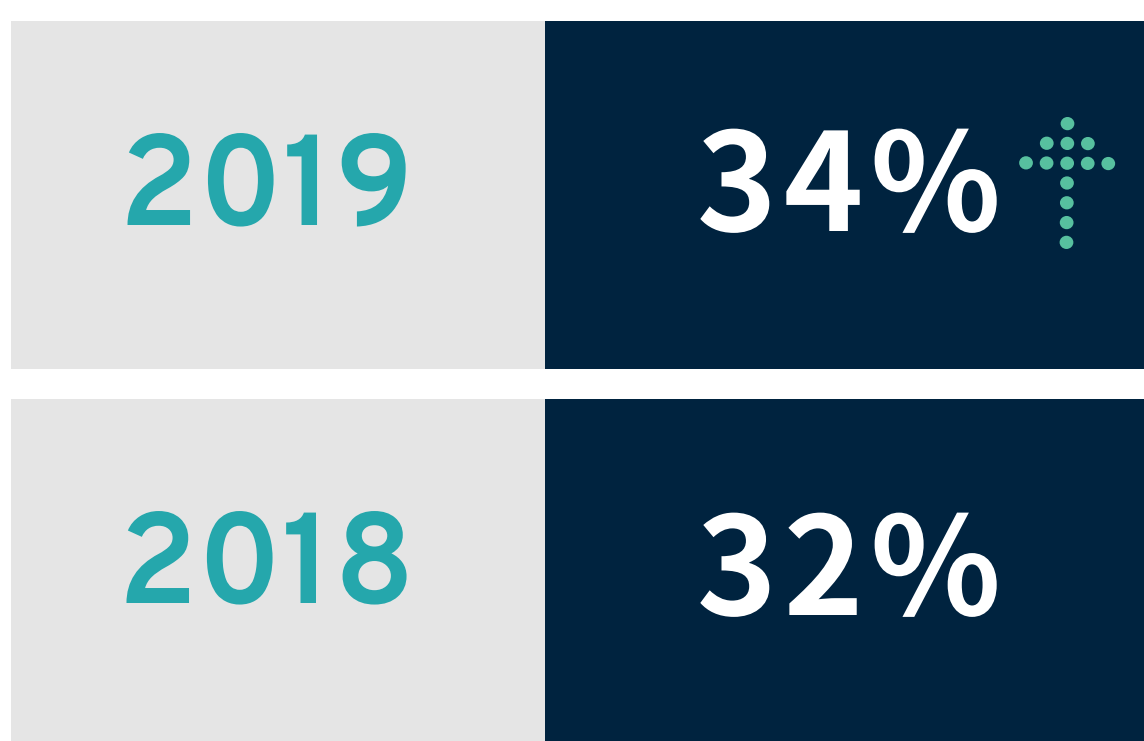
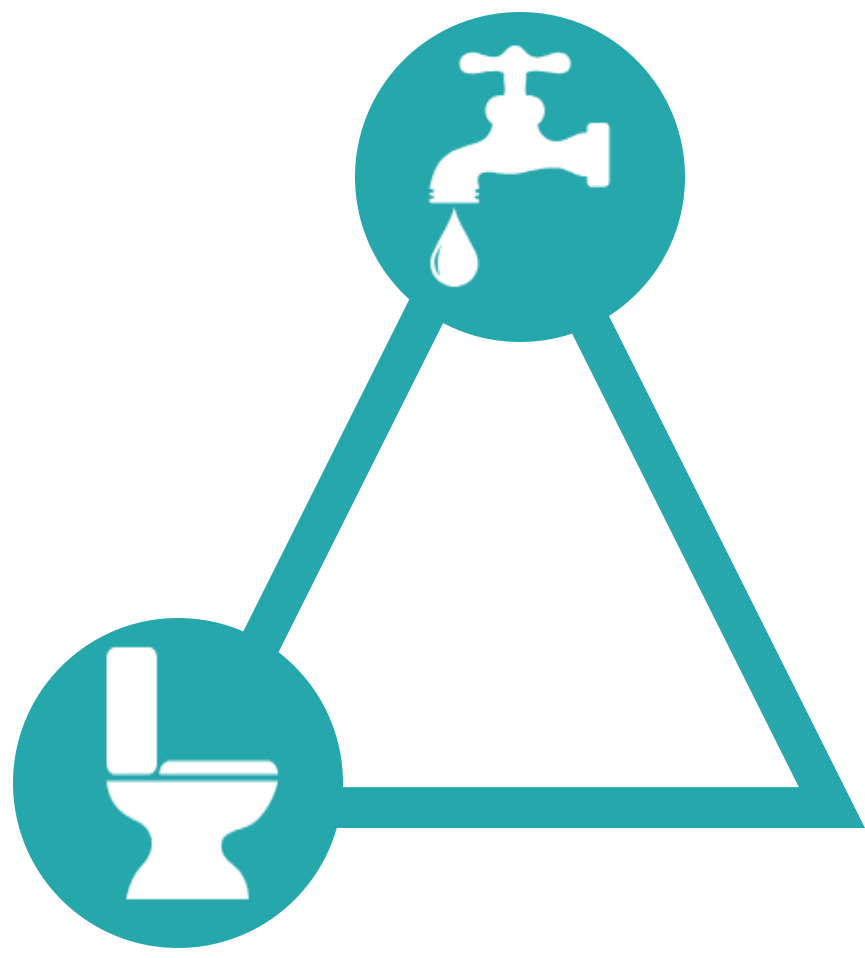
18 million people with access



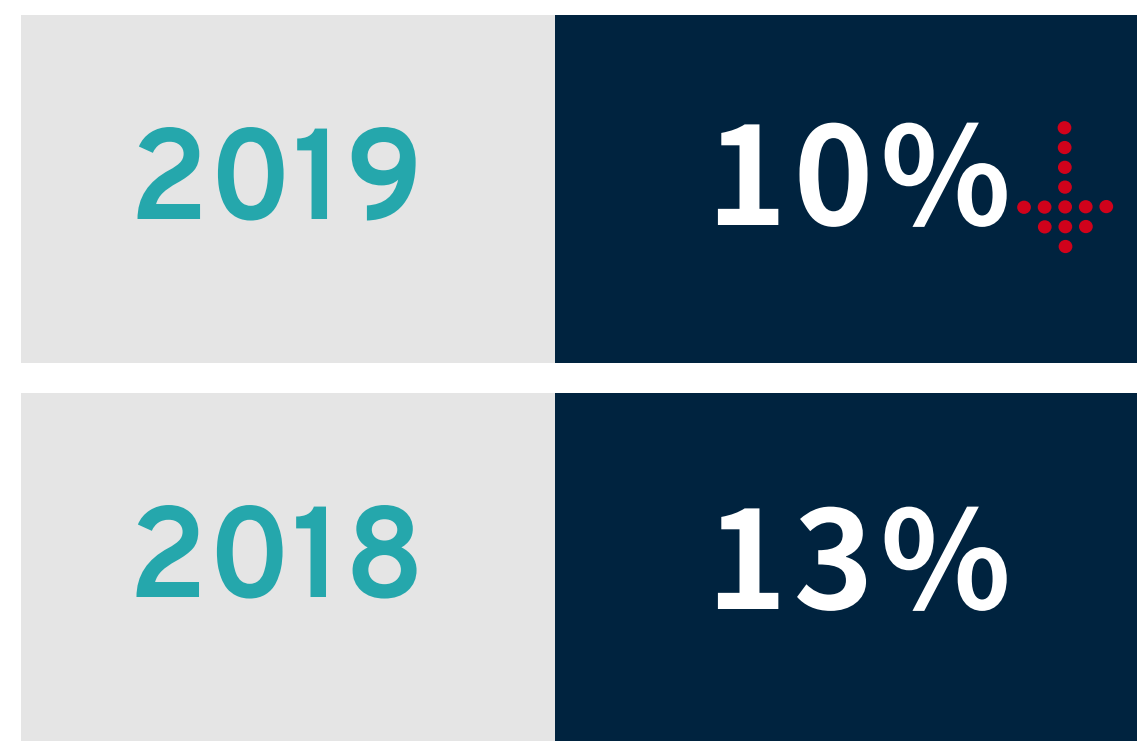
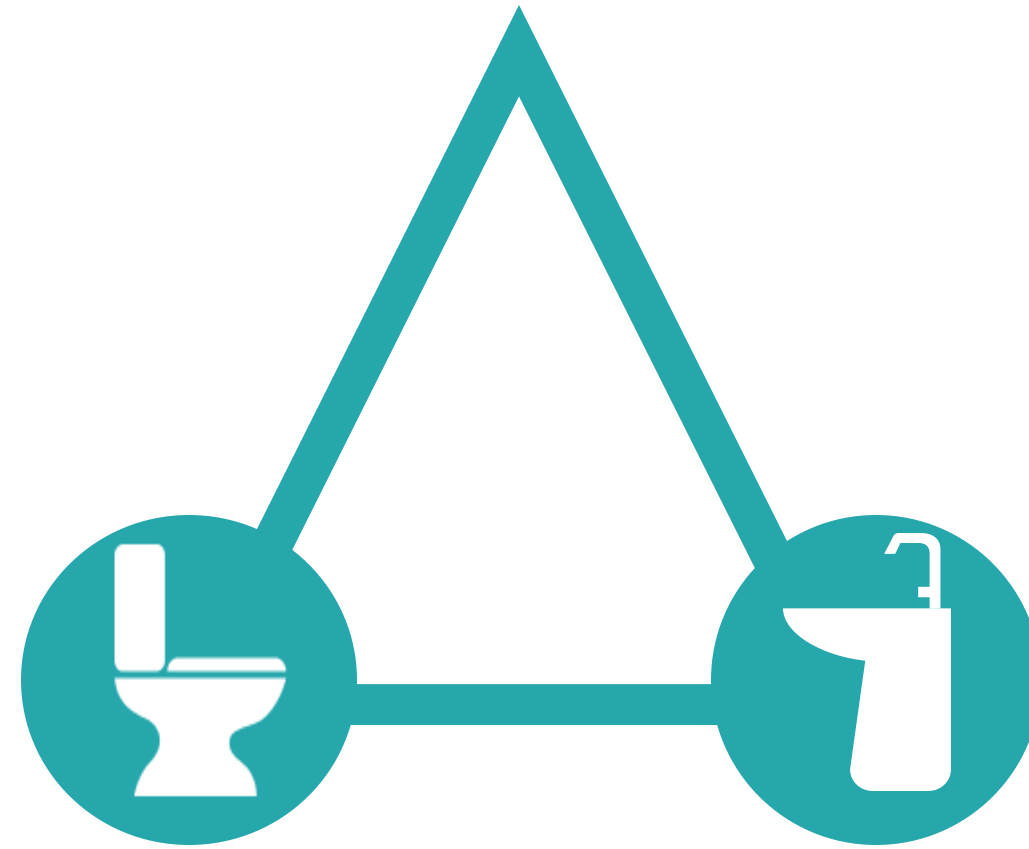
# Access to Basic Water, Sanitation and Hygiene Services in Nigeria

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 among the richest wealth quintile.

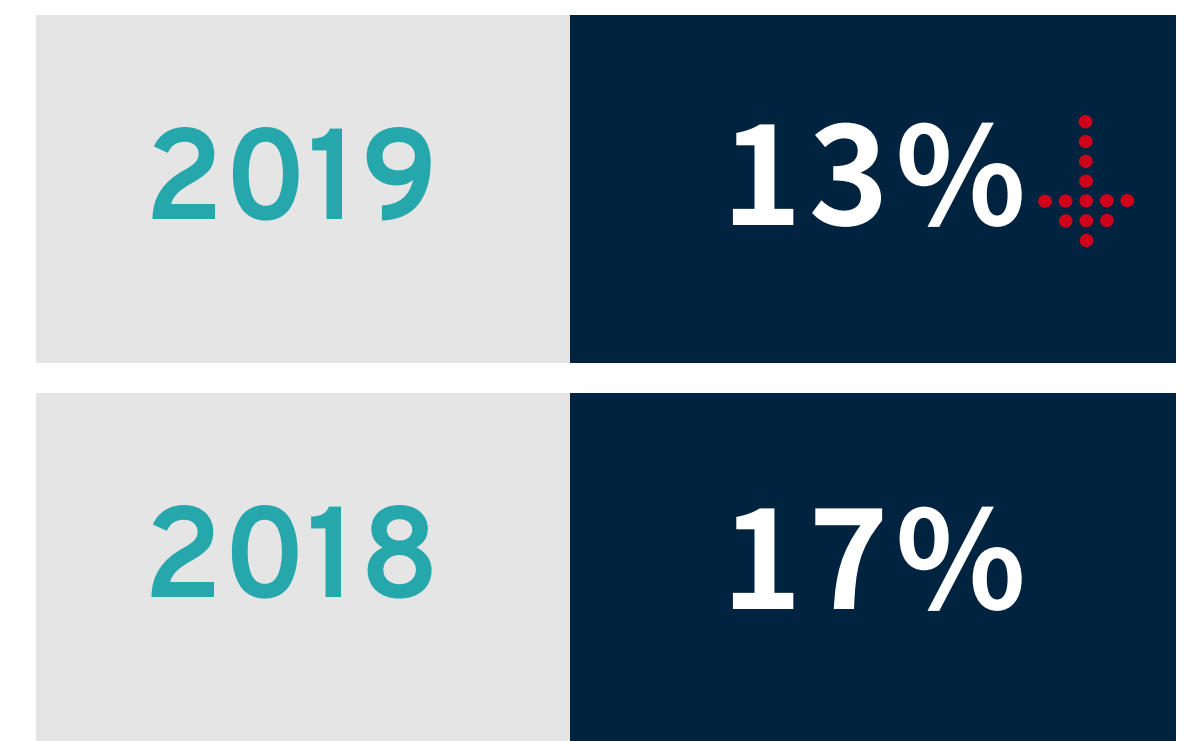
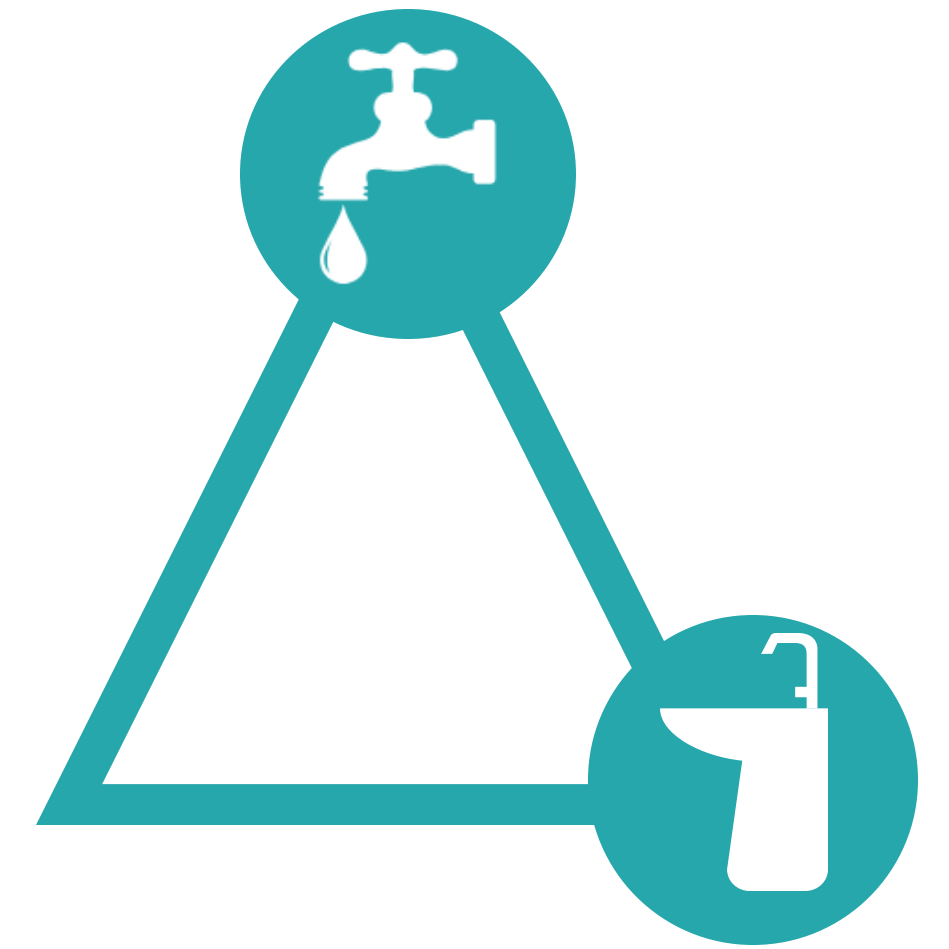
### Access to Basic Water Supply and Sanitation services



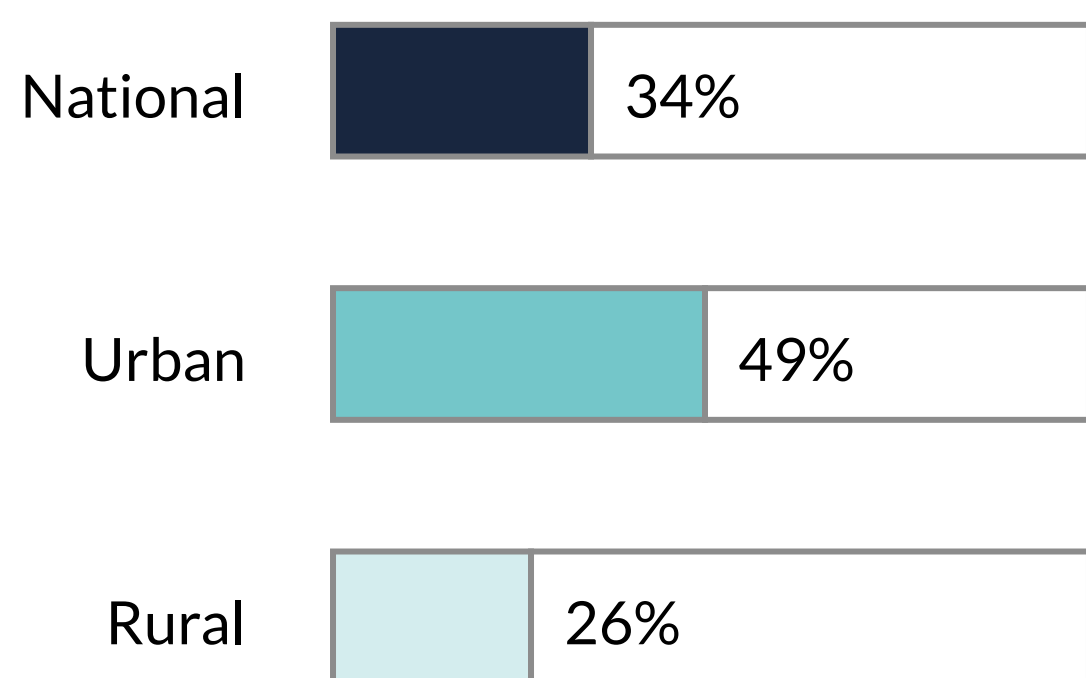
### Access to Basic Sanitation and Hygiene Services



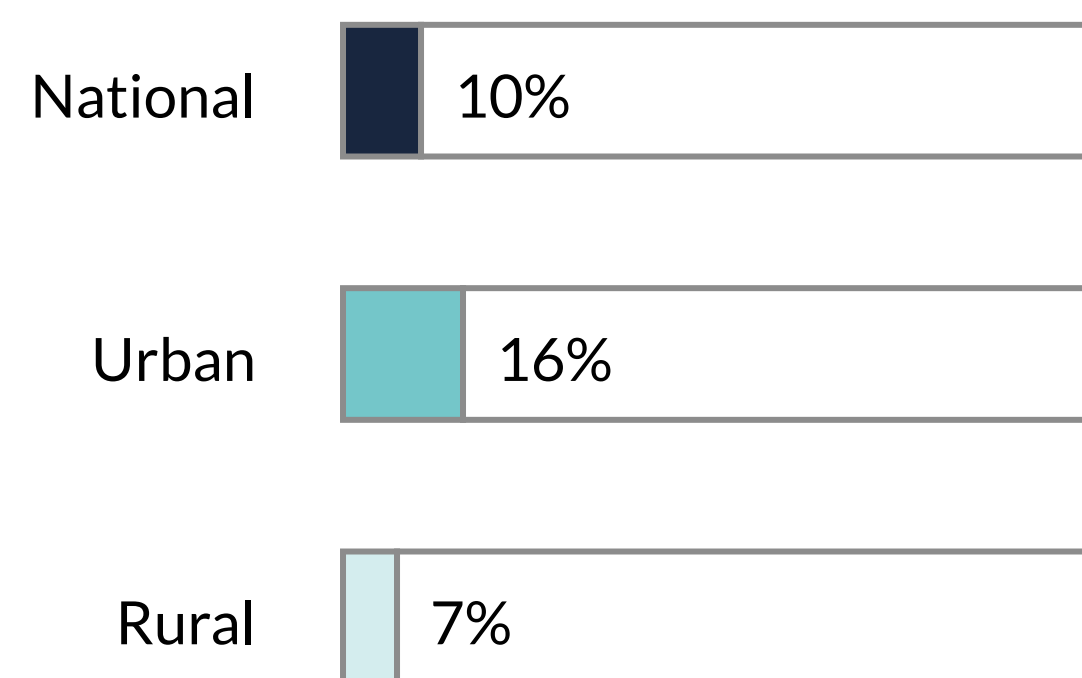
### Access to Basic Water and Hygiene Services



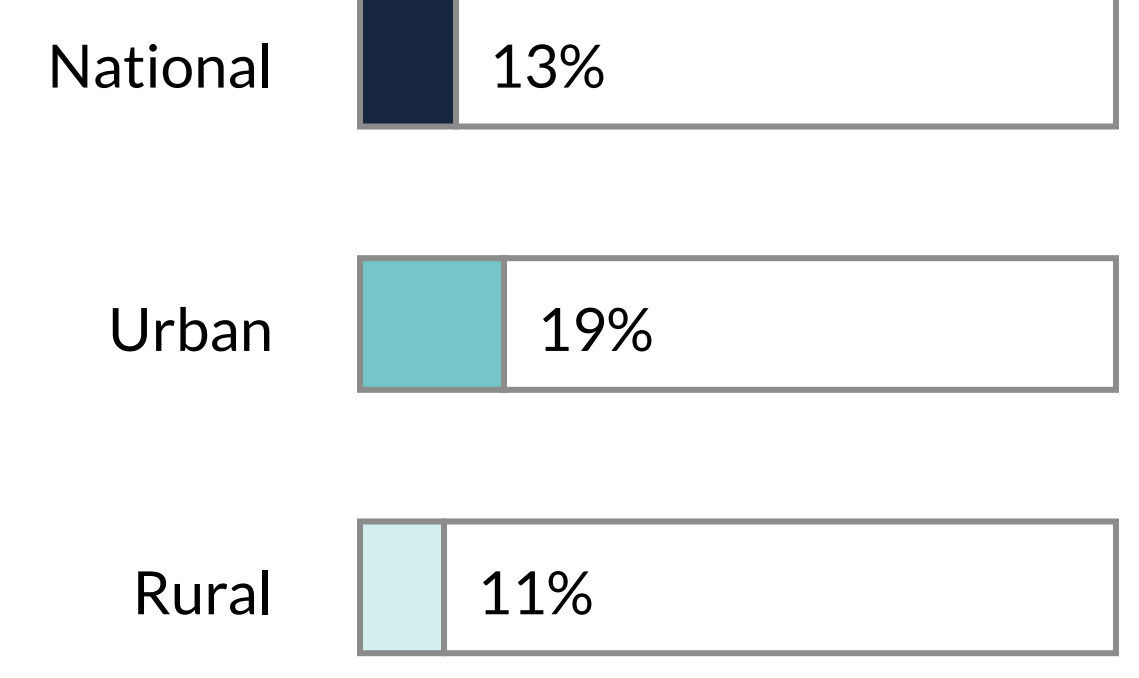
### Access to Basic Water and Sanitation Services by Area of Residence



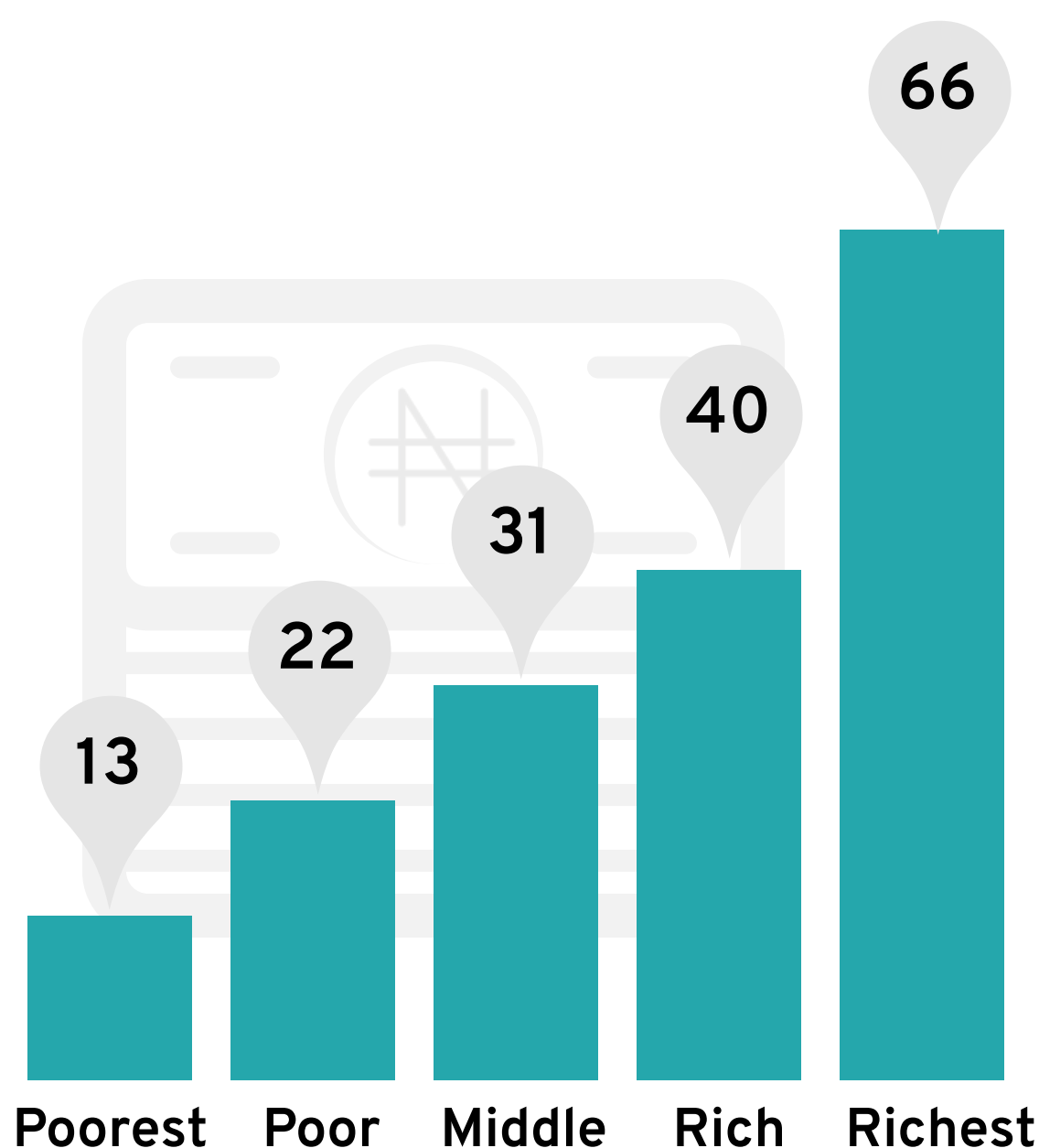
### Access to Basic Sanitation and Hygiene Services by Area of Residence



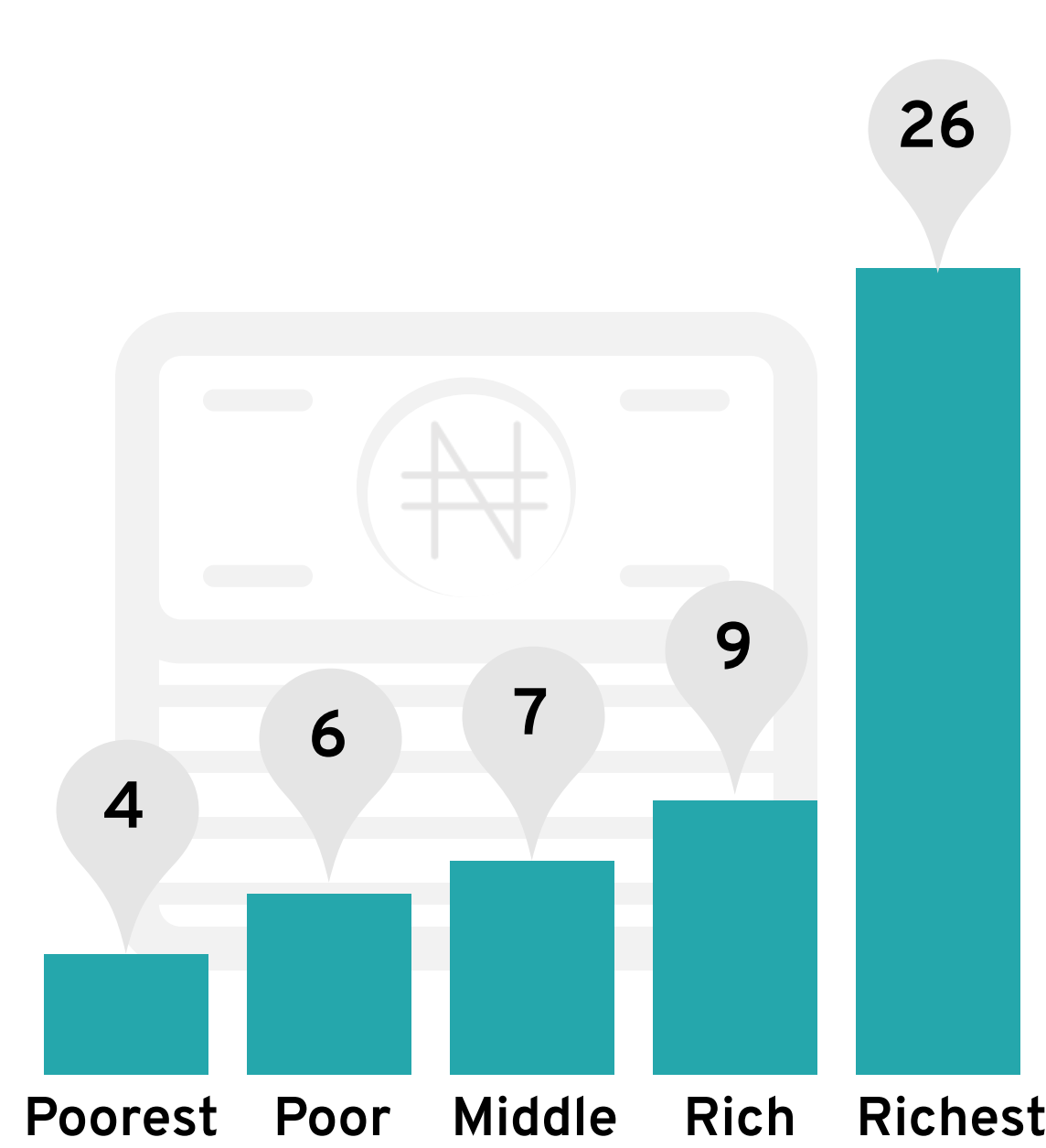
### Access to Basic Water and Hygiene Services by Area of Residence



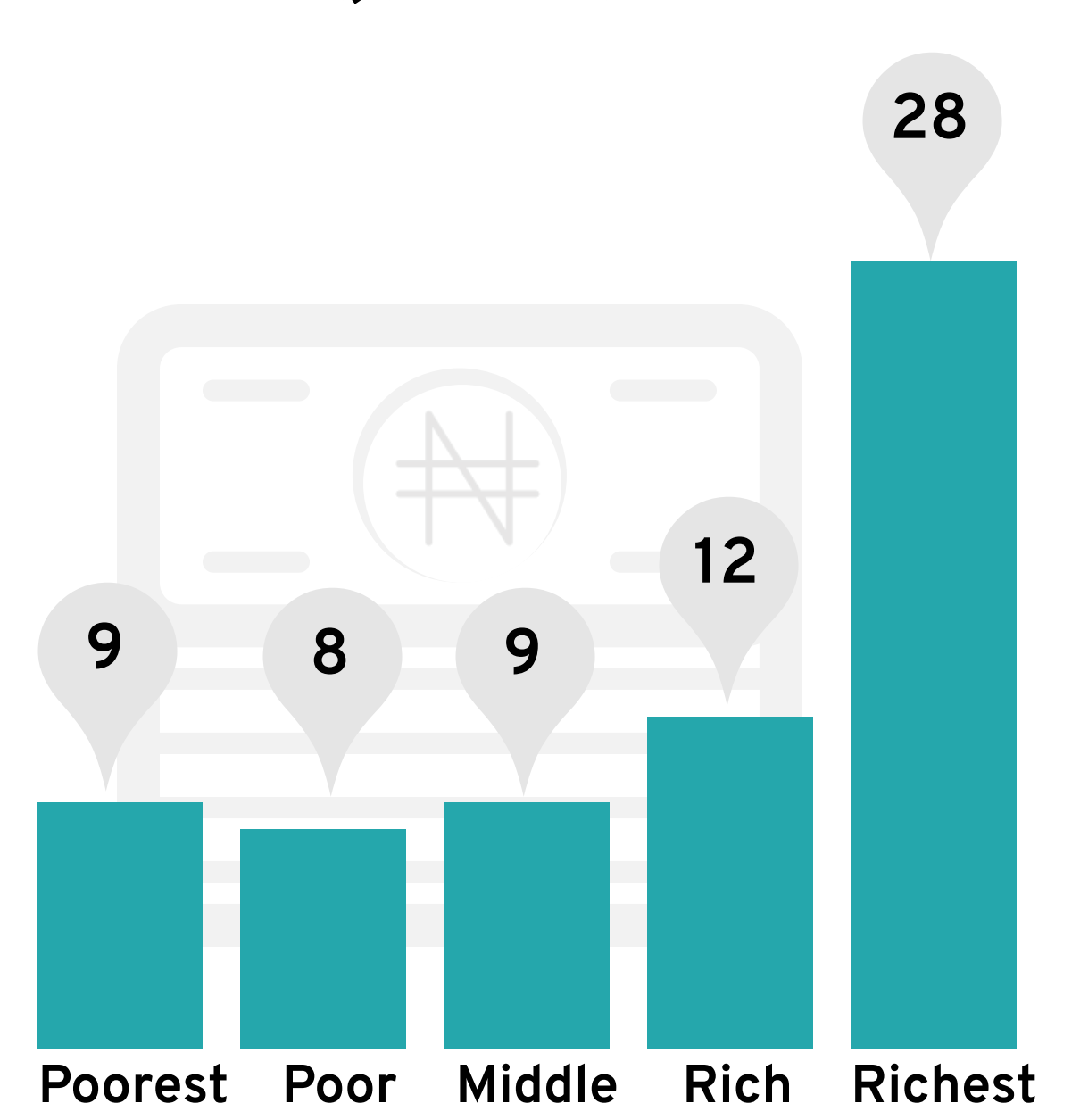
### Access to Basic Water and Sanitation Services by Wealth Quintiles



### Access to Basic Sanitation and Hygiene Services by Wealth Quintiles



### Access to Basic Water and Hygiene Services by Wealth Quintiles



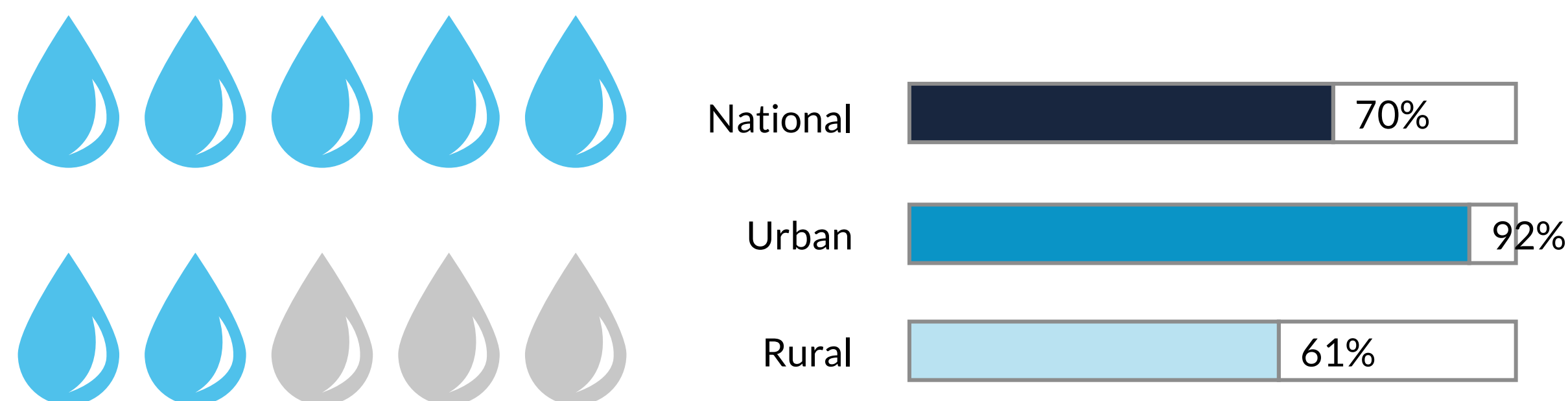


# Access to Basic Drinking Water Services



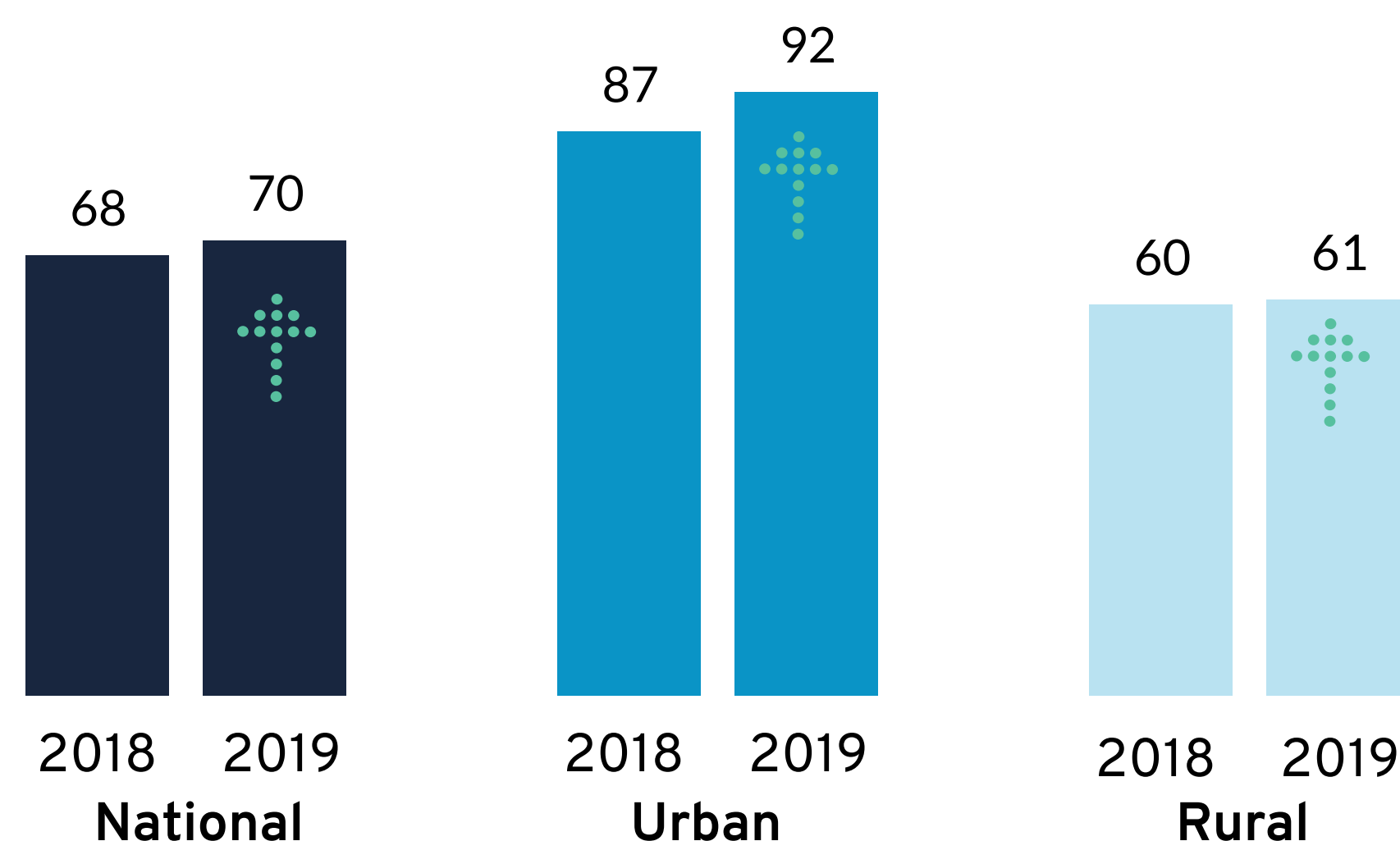
About 70 per cent of Nigerians have access to basic drinking water supply services. In comparison 2018 WASH NORM data, there has been a slight progress in the achievement of universal and equitable access to the use of basic drinking water services, especially for those living in urban areas.

## Access to Basic Drinking Water Supply Services



**70%** have access to basic drinking water supply services

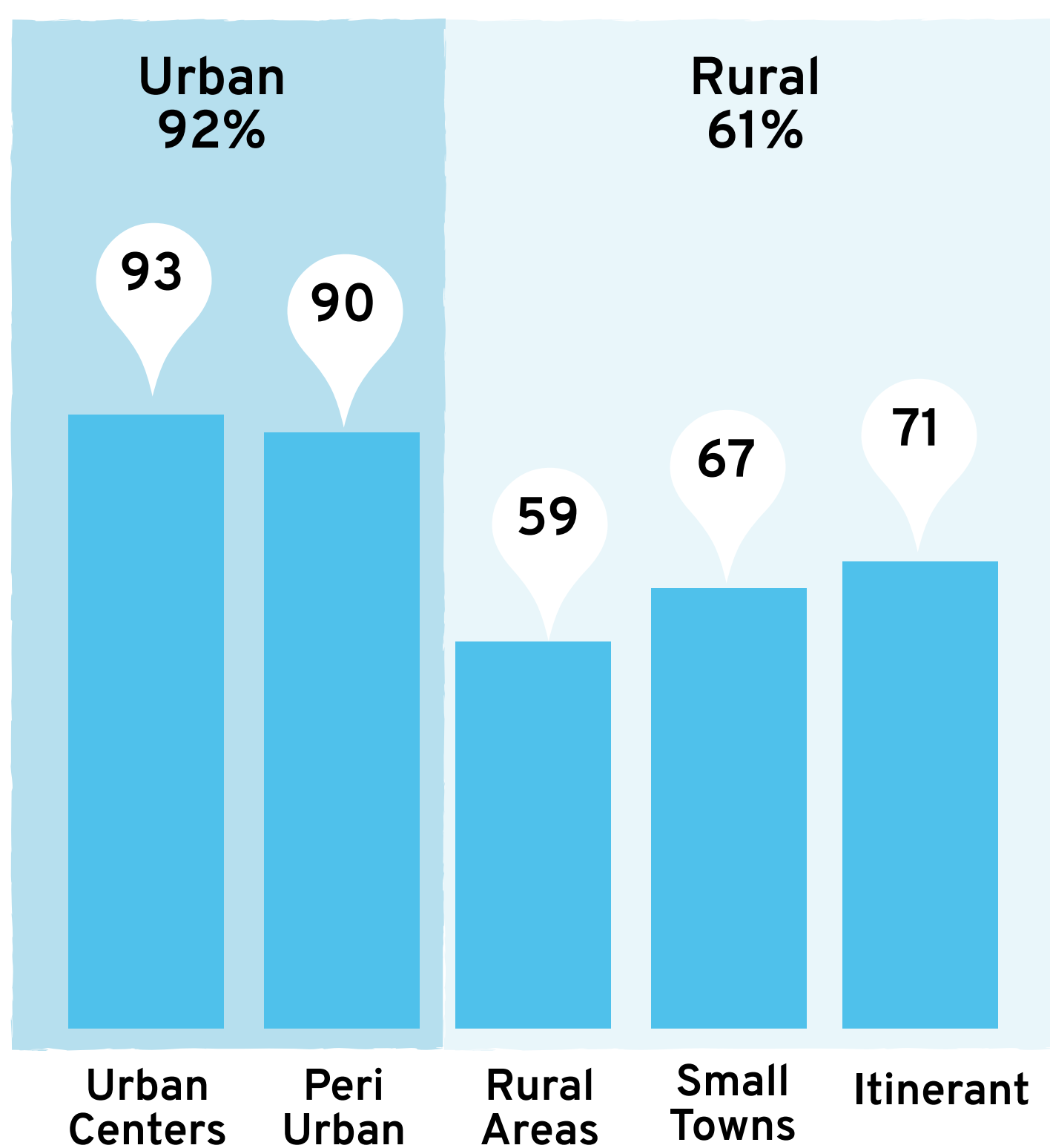
## Trends in the use of basic drinking water supply (2018 - 2019)



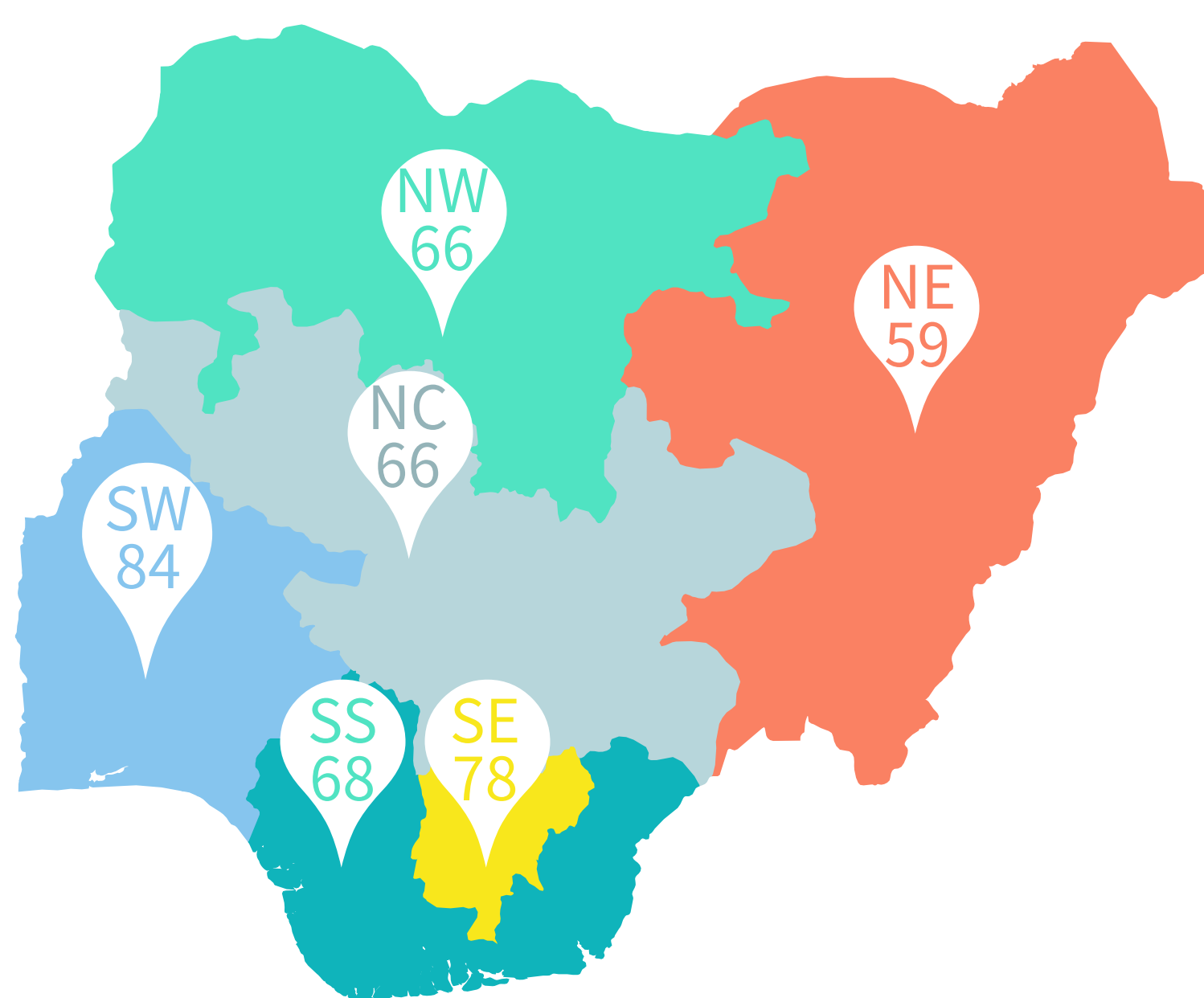
## Equity in Access to Basic Water Supply Services

There are stark disparities in access to basic water supply services with regards to the wealth quintiles. People from the poorest households are about two times less likely to have access to basic water supply services than those from the richest households.

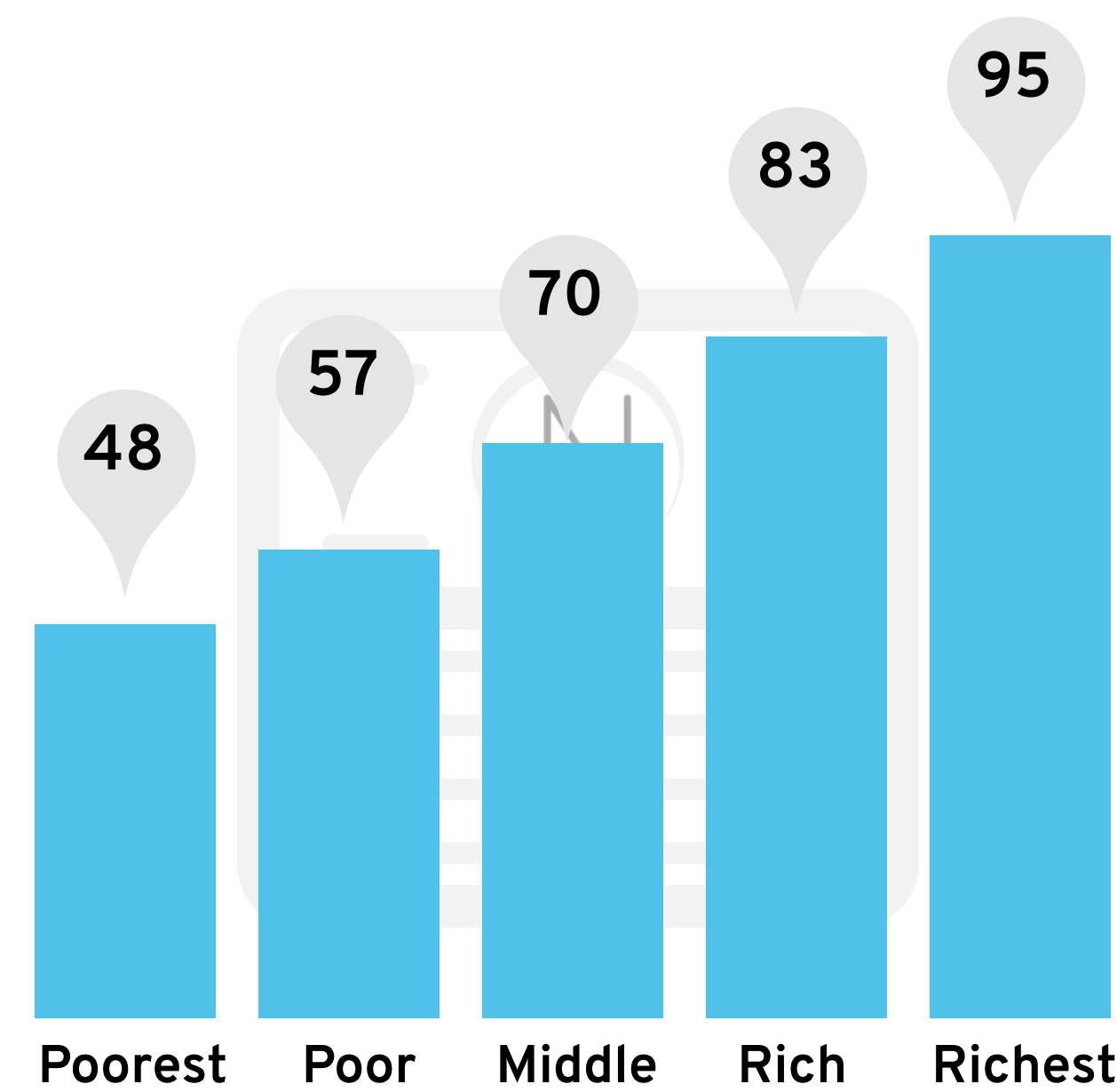
### Access to Basic Water Services by Area of Residence



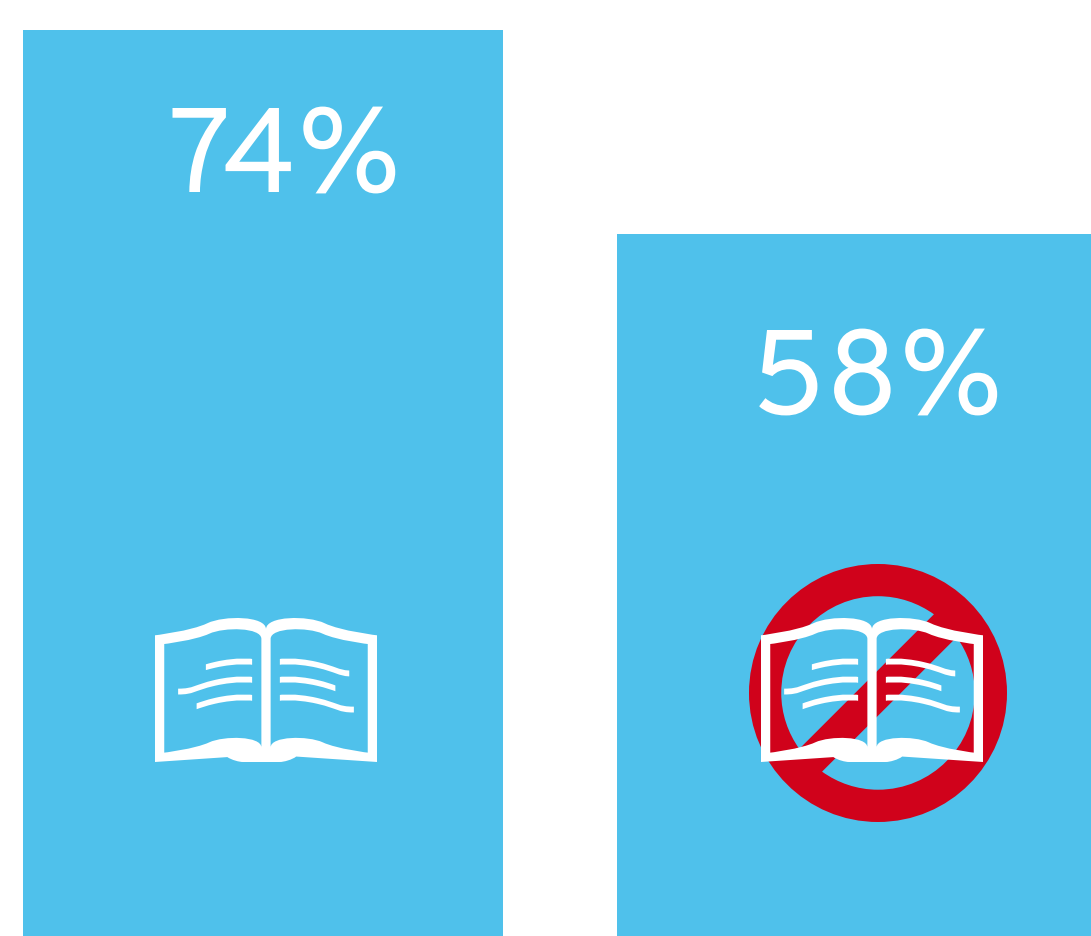
### Access to Basic Water Services by Geopolitical Zones



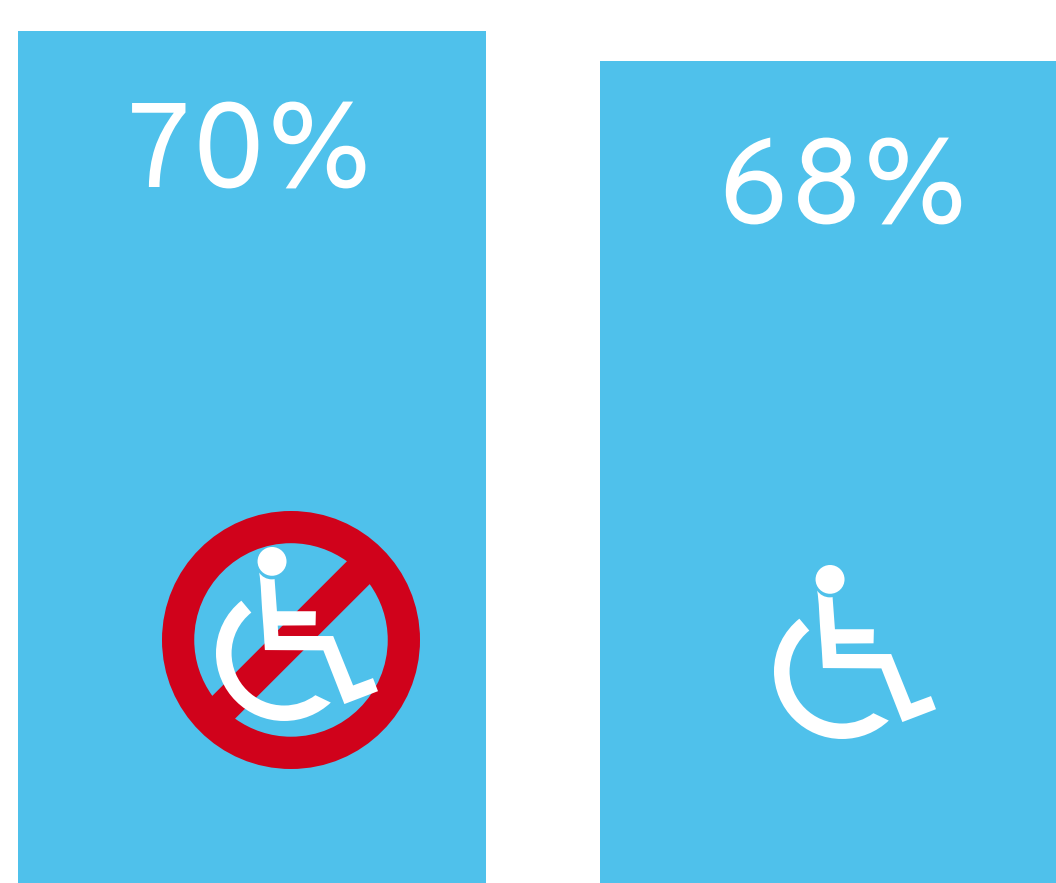
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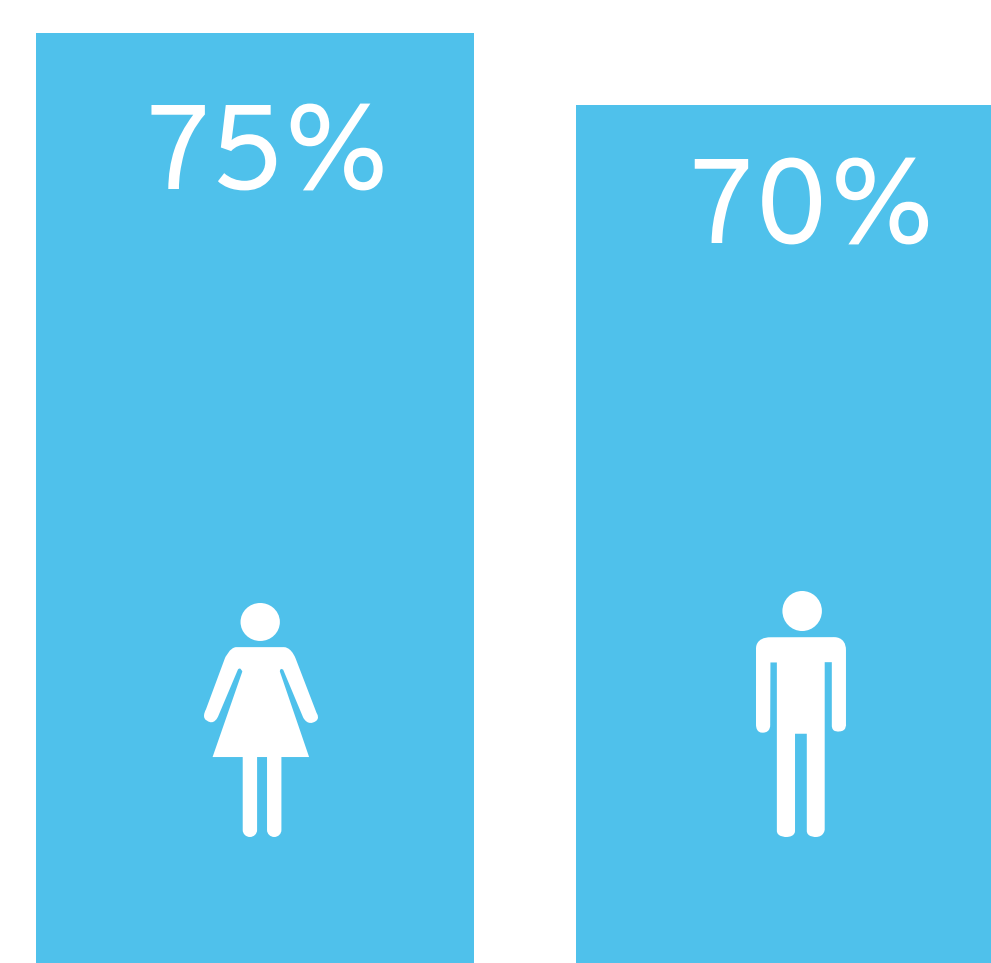
### Access to Basic Water Services by Education of Household Head (Literate vs. Non-Literate)



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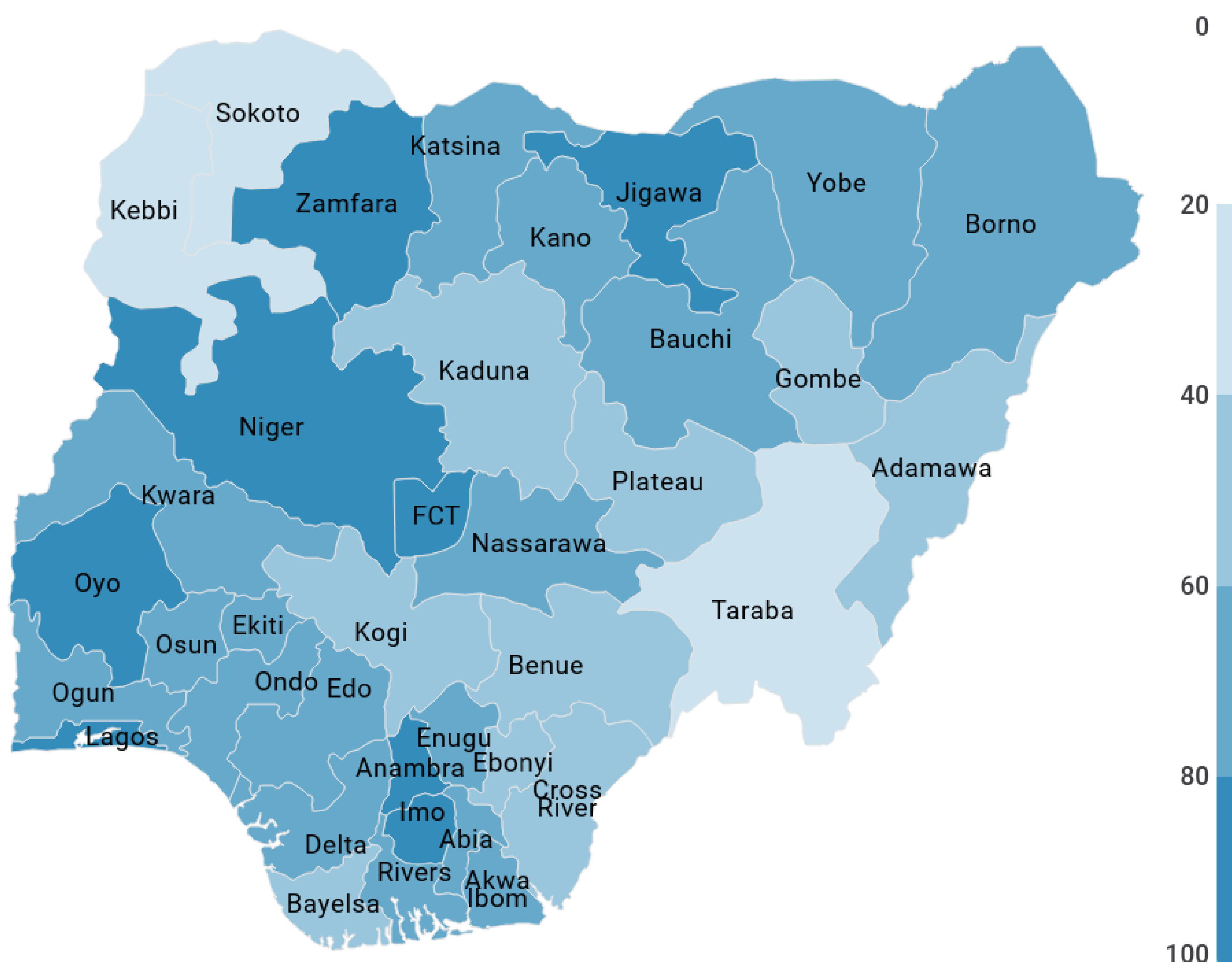


### Access to Basic Water Services by Gender of Head of Household





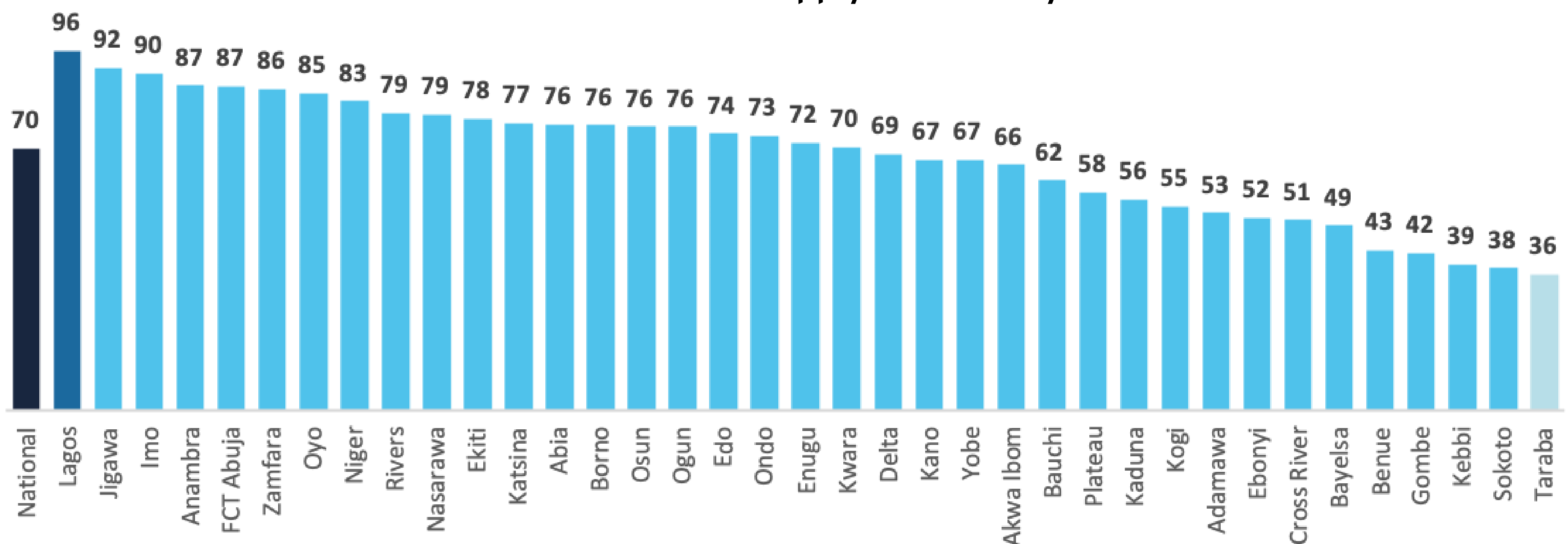
## Area Value Map for Access to Basic Water Supply Services in Nigeria



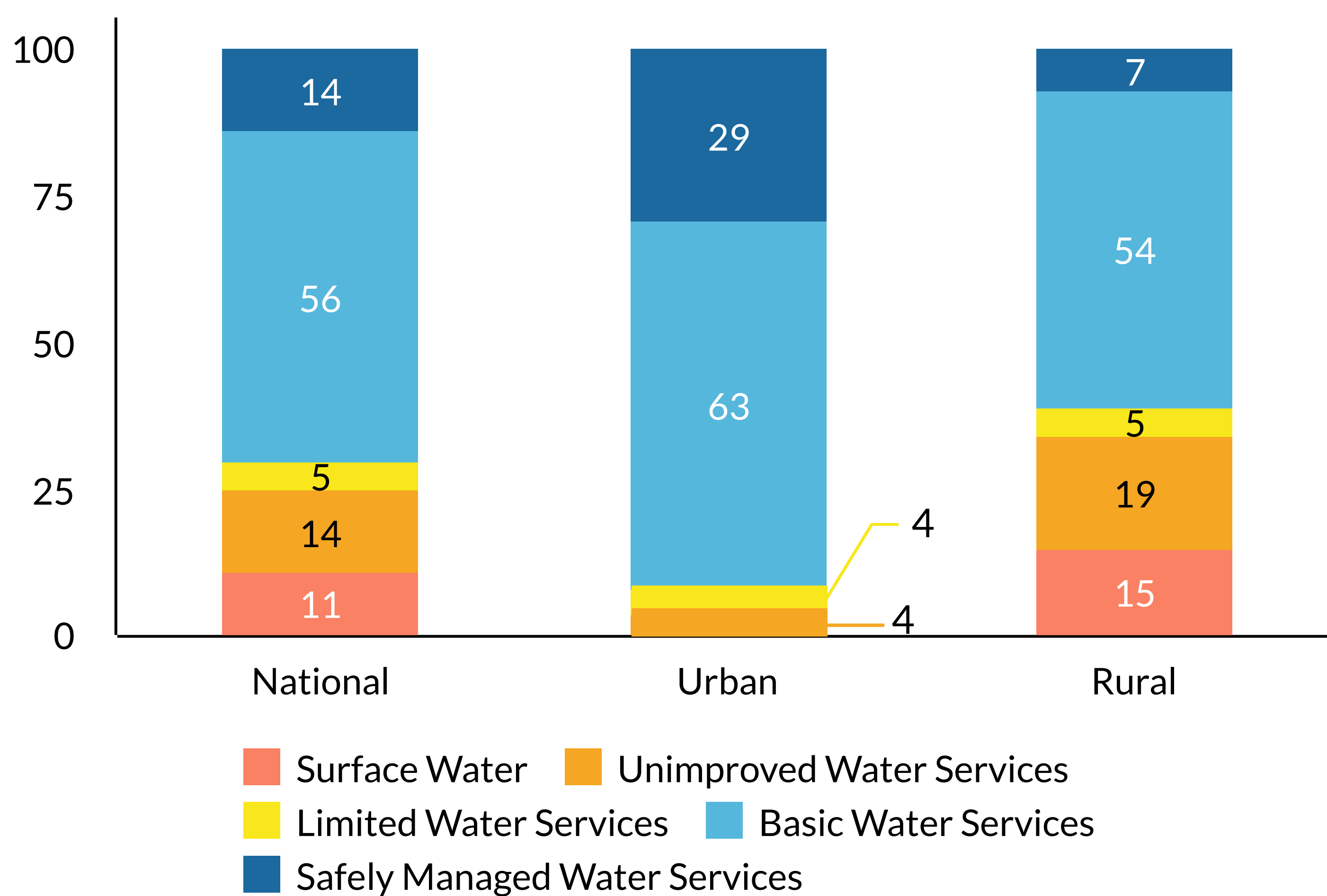
## Access to Basic Water Services by State

People living in Lagos are three times more likely to use basic water supply services than those living in Taraba.

## 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 2.04 million water facilities in Nigeria, 70% are self-supplied, 1 out of 5 have provisions for persons living with disabilities and two-thirds are boreholes.



**2.04 M**

estimated water facilities exist in Nigeria



**70%**

of water facilities are constructed by non-government actors, 64% are self-supplied



**19%**

of water facilities have provisions for people living with disabilities



**67%**

of all water facilities are boreholes



**32%**

boreholes are motorized



**11%**

of motorized boreholes are solar-powered

## Management of Publicly-used Water Facilities



**6%**

of all publicly-used water facilities have tariff system in place



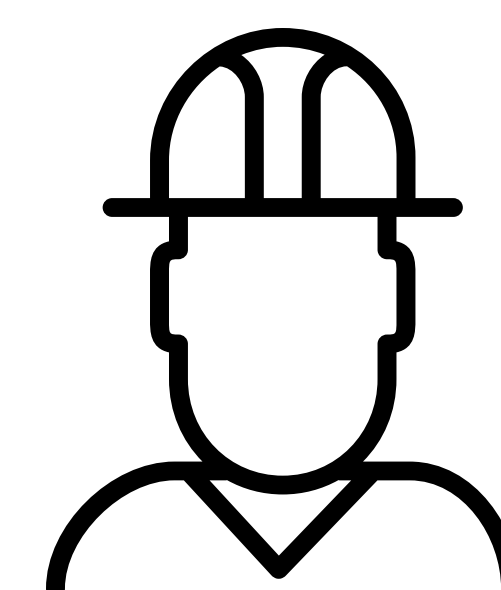
**33%**

of all publicly-used water facilities have water point management committees in place

**19%**  
Female



**81%**  
Male



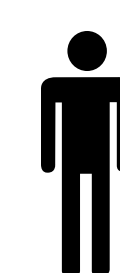
**49%**

of all publicly-used water facilities have water point facility caretakers in place

**3%**  
Female



**97%**  
Male



## 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.



**28**

out of 36 states (+ FCT) have urban water utilities that produce water



**16**

states have fully functional urban water utilities



**8%**

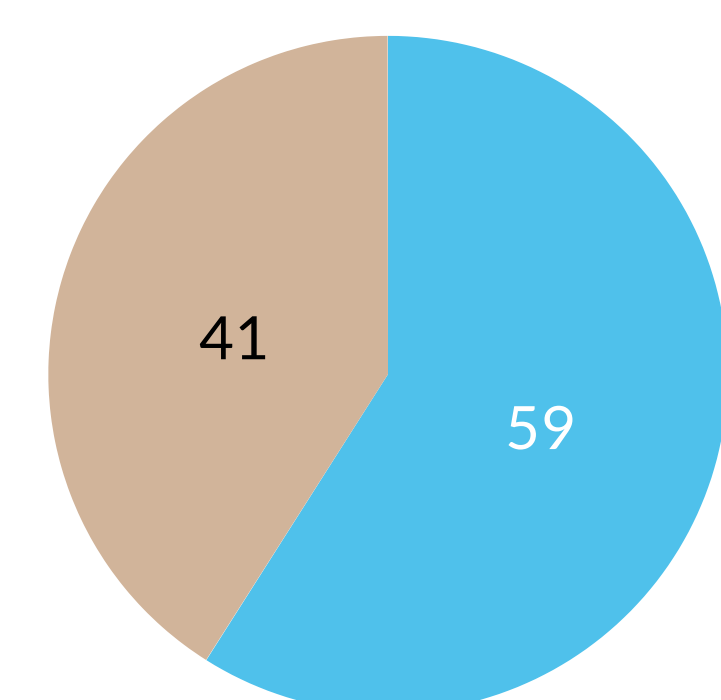
of urban water utilities' consumers are metered



**64%**

of urban utilities' consumers do not depend solely on their taps for drinking water

**41% of all taps fed by urban utilities' supply are contaminated with E. coli**



■ No Contamination (59%)  
■ Contaminated (41%)



## Functionality of Water Systems In Nigeria

Up to 74 per cent of publicly-owned water facilities are functional, a 5 percentage point increase from 2018. There are only minor disparities across area of residences, ownership, usage and water facility type.

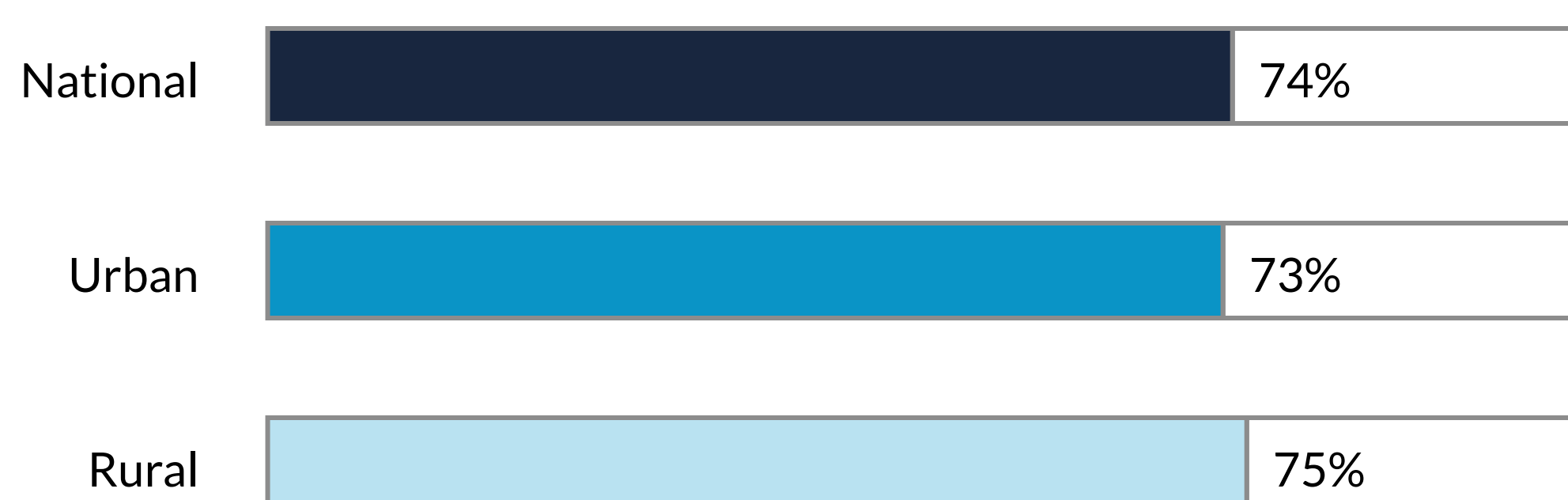


# 74%

of public water facilities are functional

2019	74%
2018	69%

### Functionality by Area of Residence



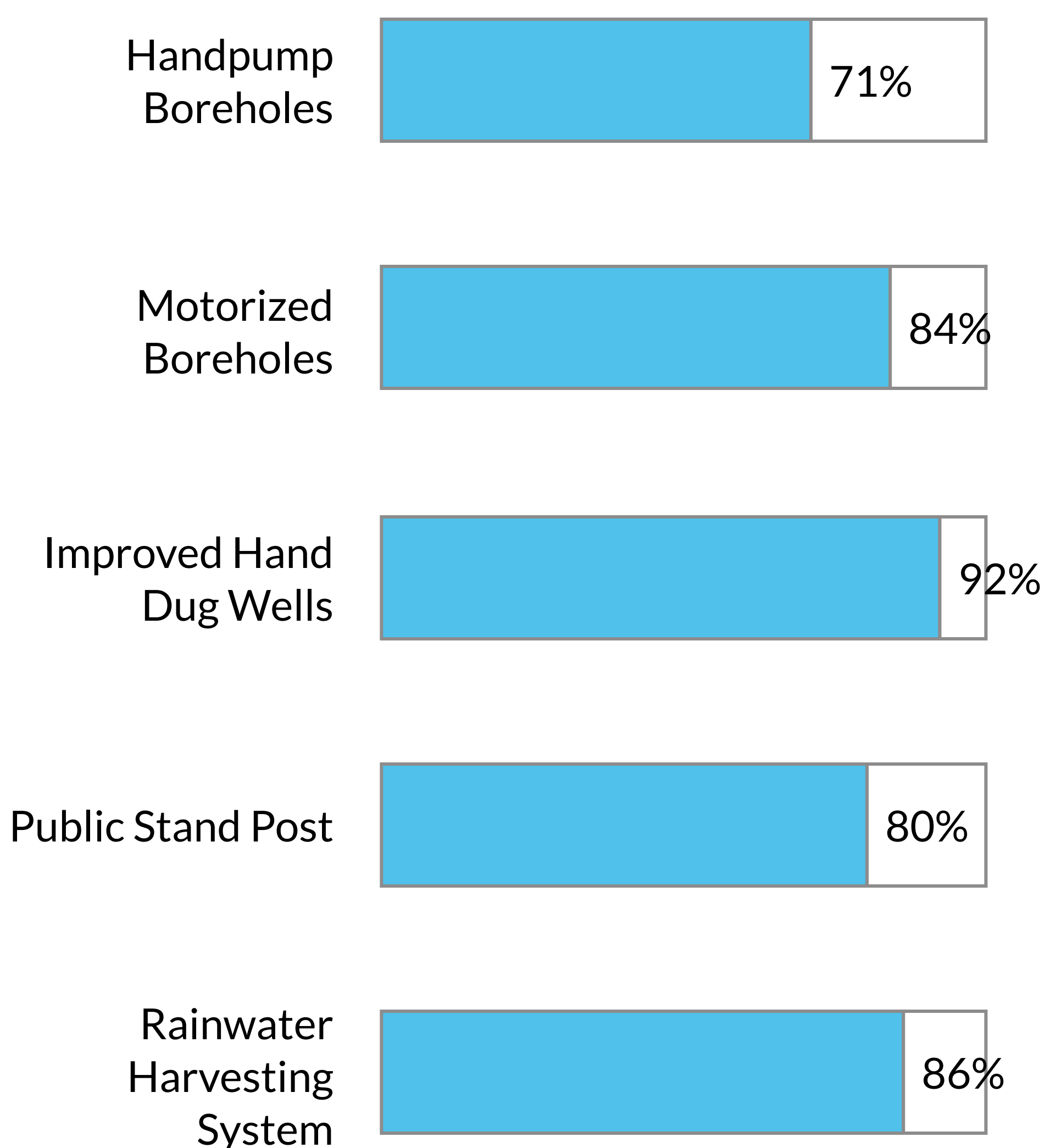
### Functionality of All Facilities by Ownership



### Functionality of All Facilities by Usage



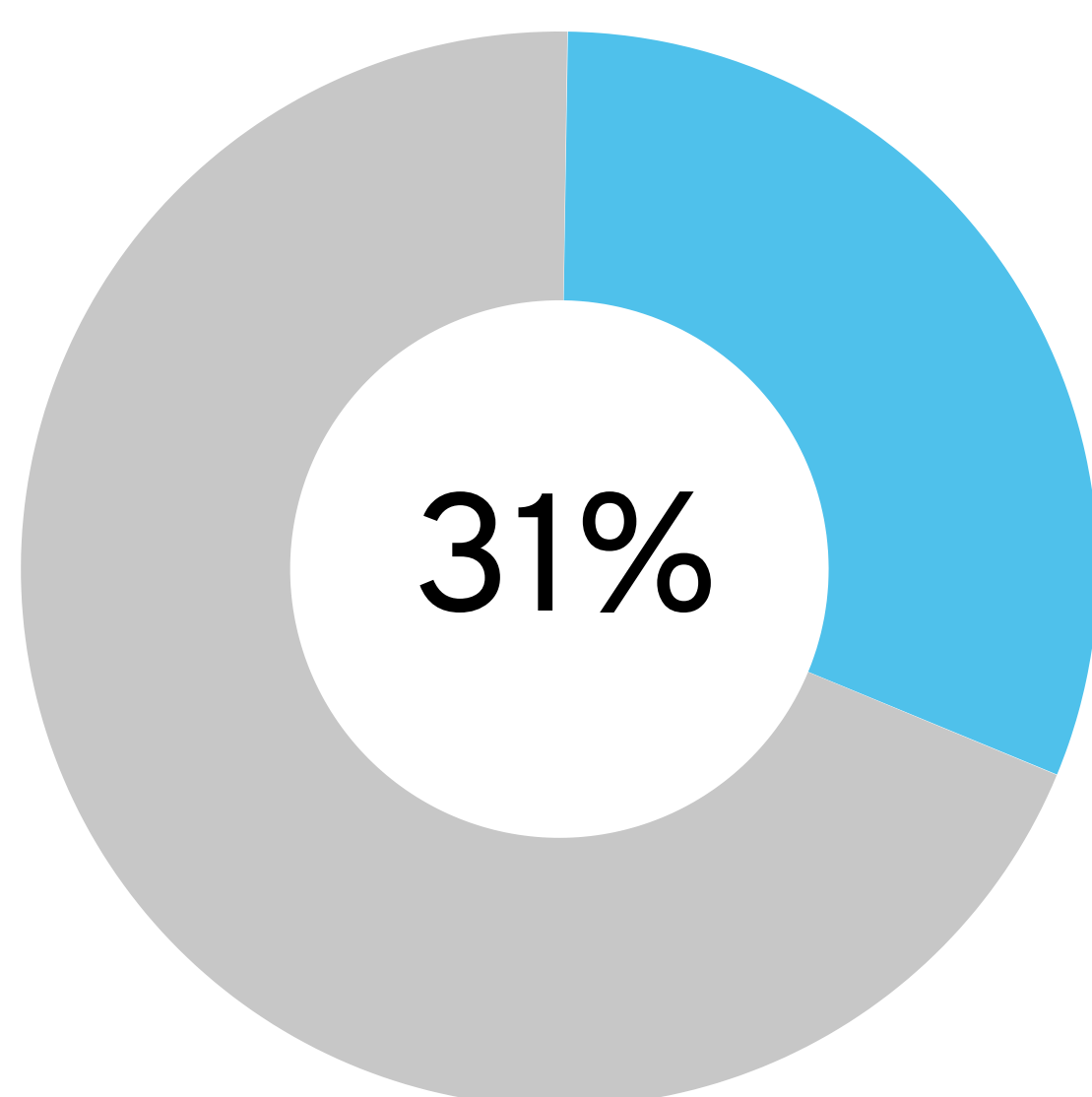
### Functionality of All Water Facilities by Type



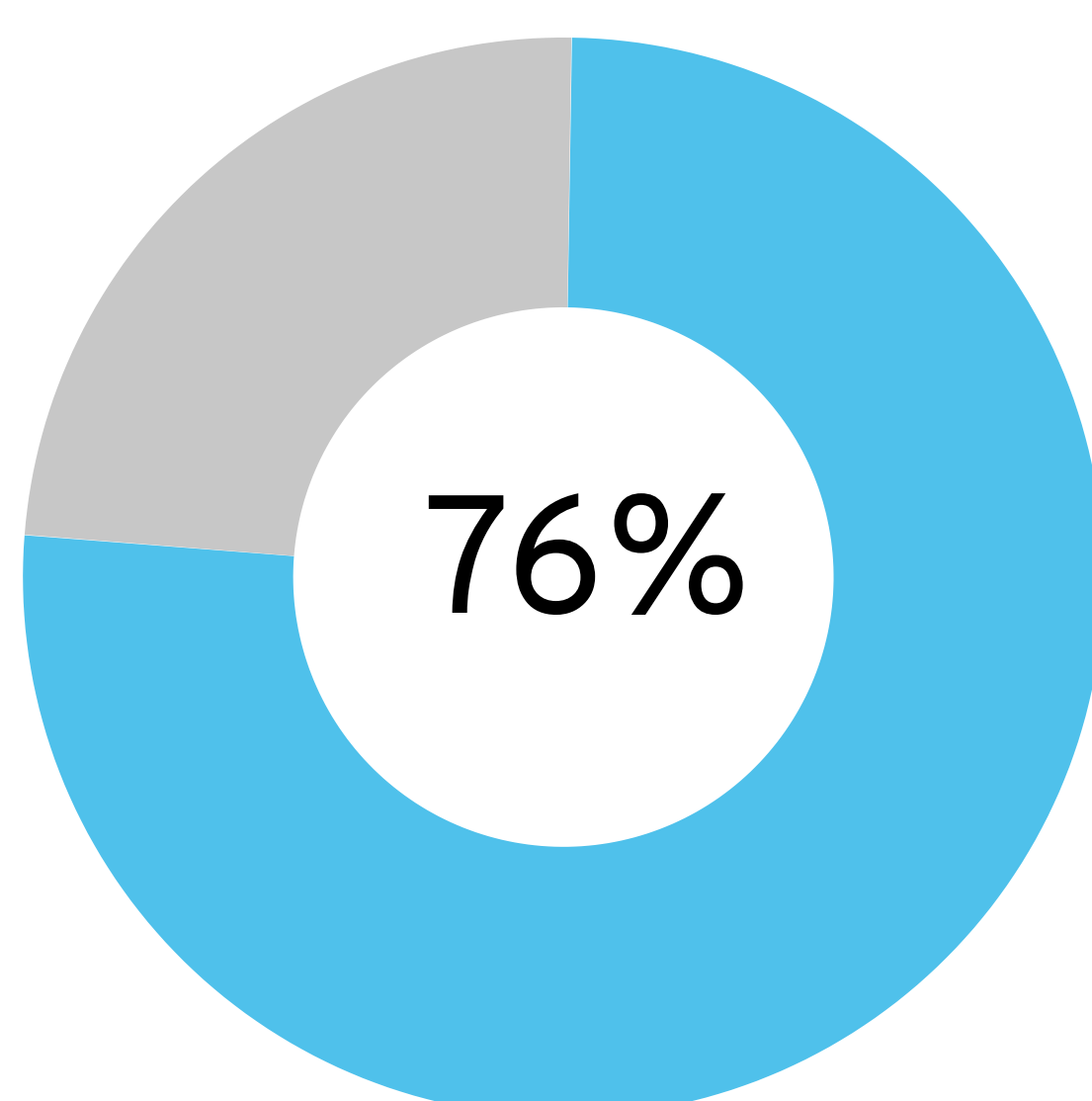
## Dependability of Public Water Systems in Nigeria

Only 1 in 5 water points are dependable with respect to their design and configuration, 64 per cent are dependable with respect to their functionality and only 8 per cent are dependable with respect to their operations and maintenance.

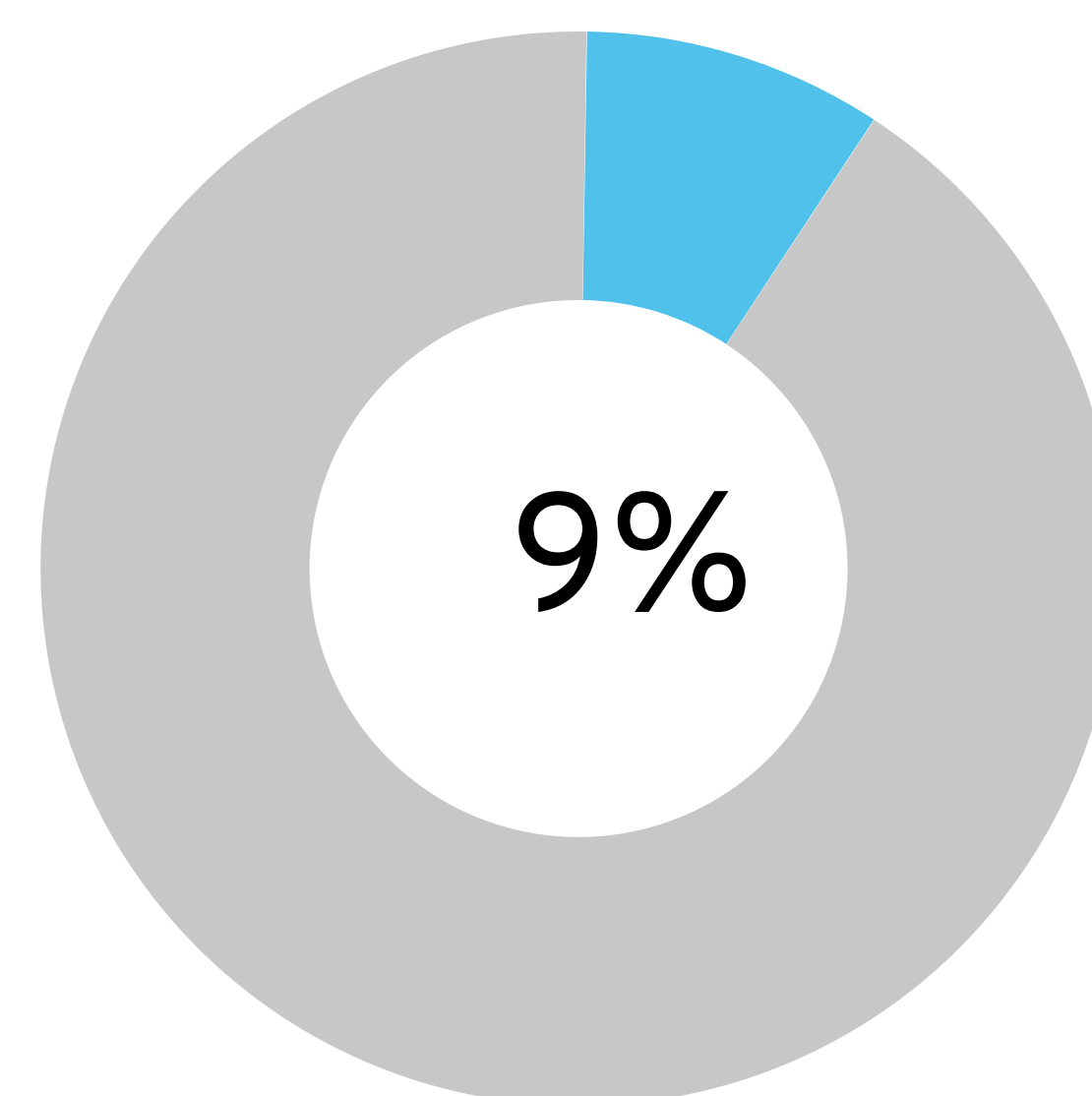
### Design and Configuration



### Functionality



### Operations and Maintenance

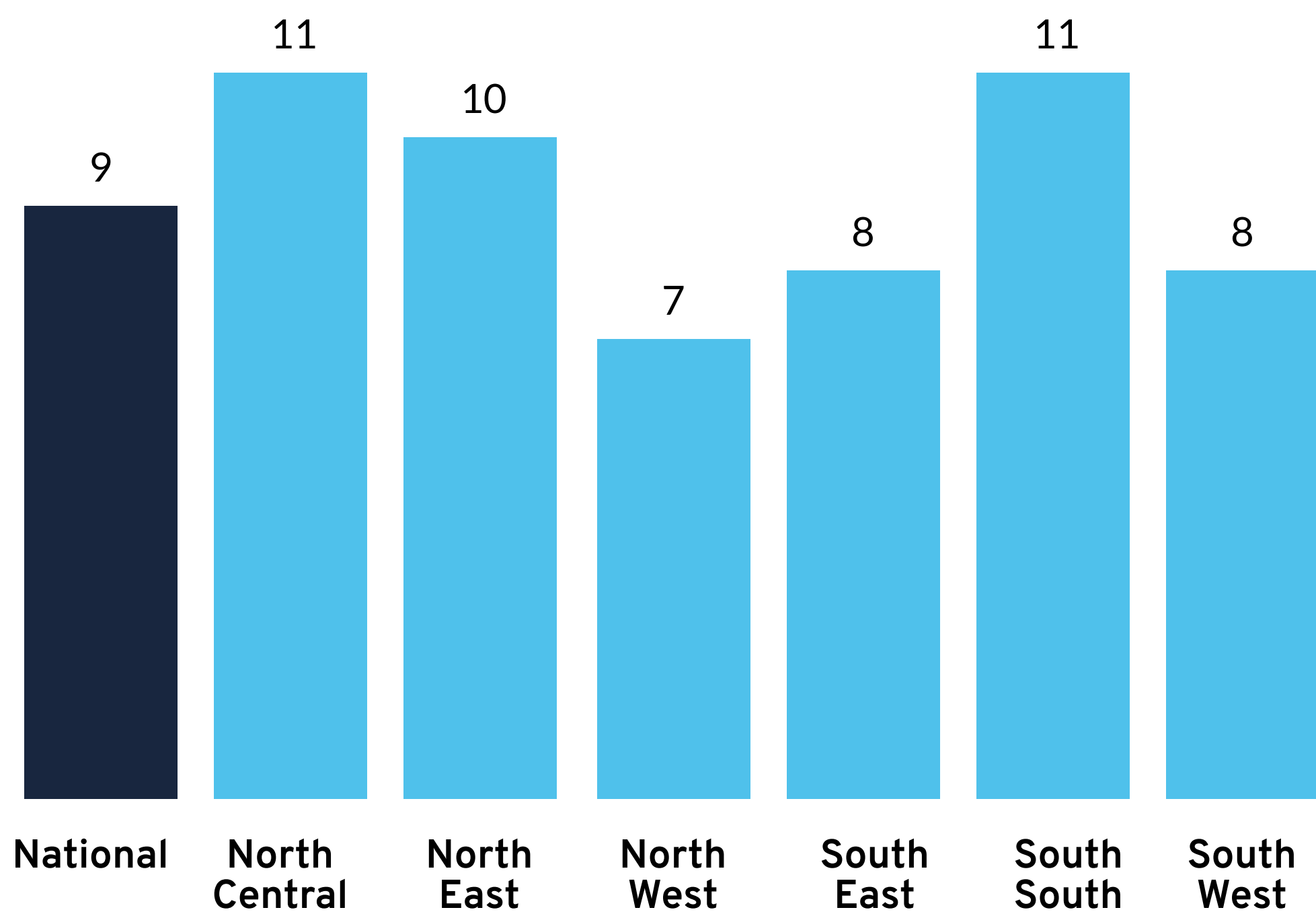




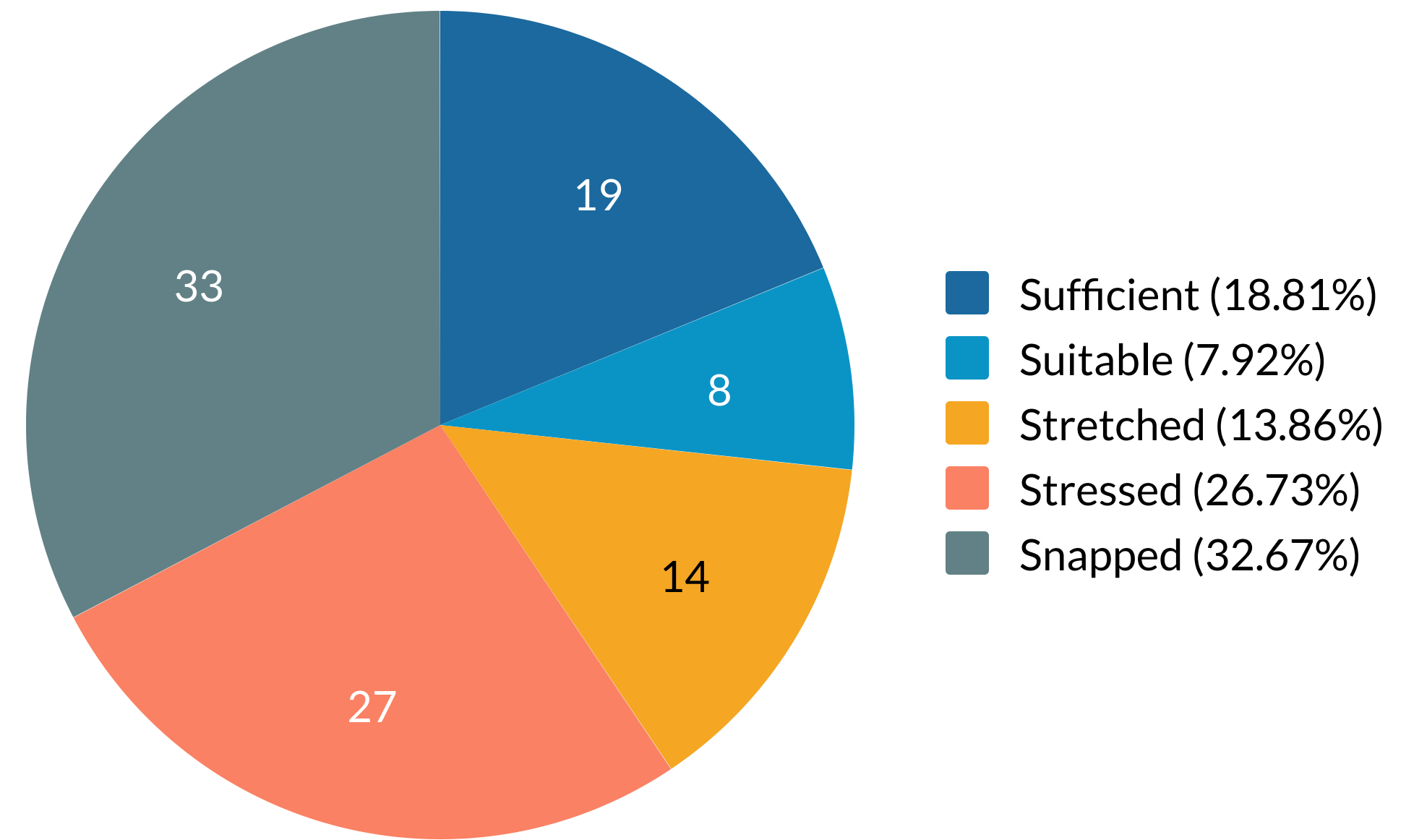
# Adequacy of Water Systems In Nigeria

In rural areas, the average per capita share of drinking water is 8.6 liters/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)**

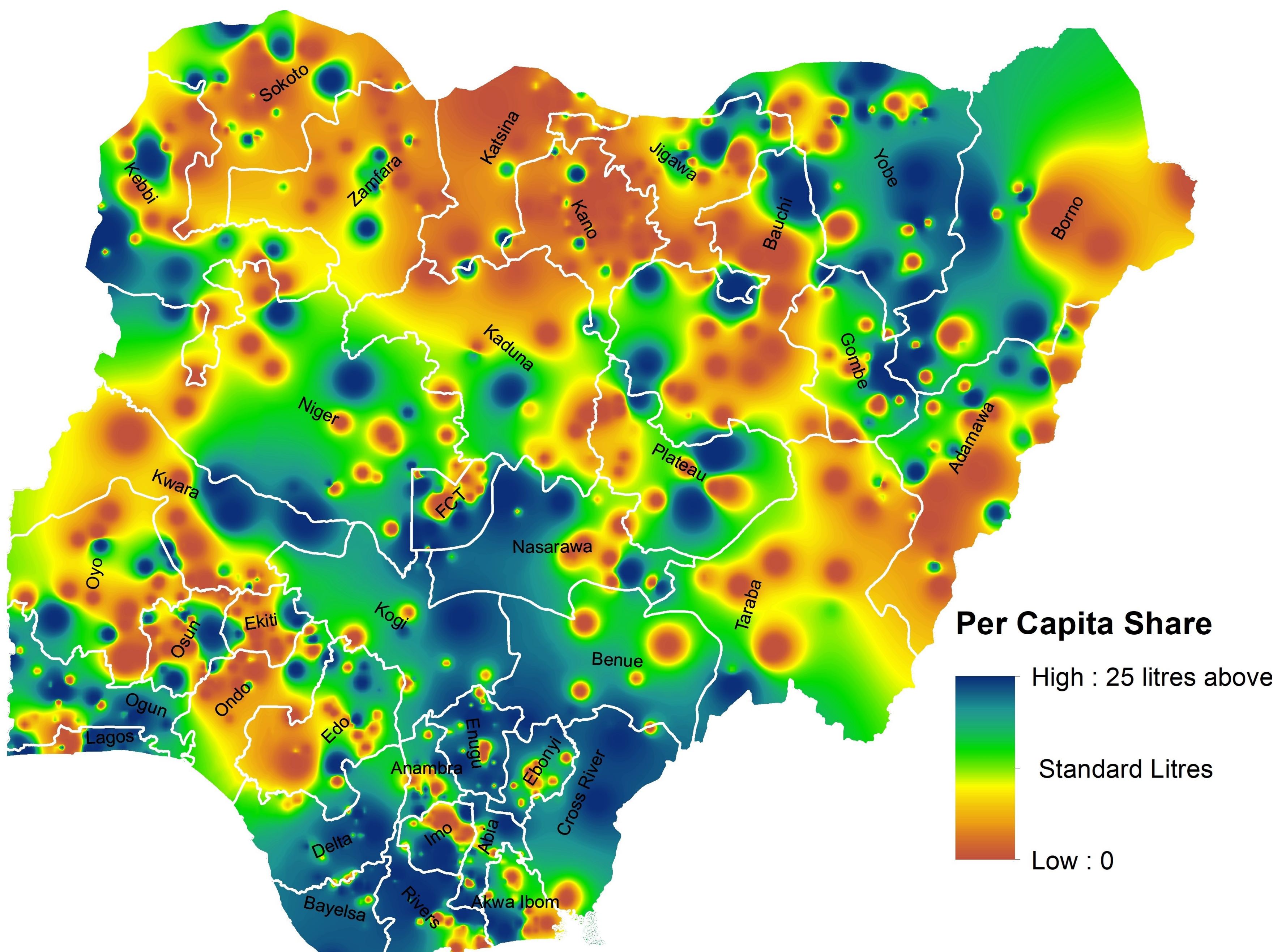


**Per Capita Share of Water by Population Served**



- 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 3 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**

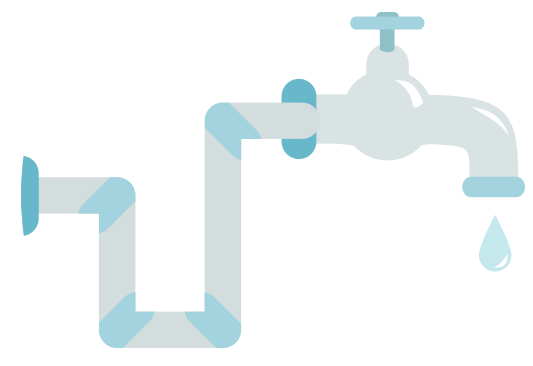




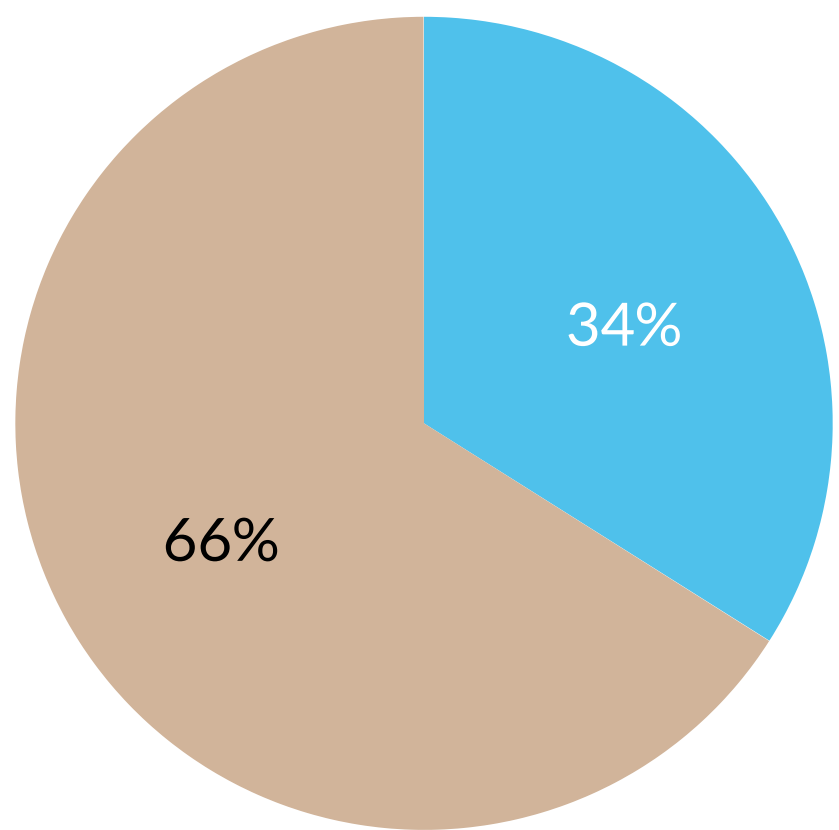
# Status of Water Quality in Households in Nigeria

Slightly more than a third of drinking water from sources and from points of consumption within households are free from contamination. Rural dwellers are exposed to more contaminated drinking water than urban dwellers.

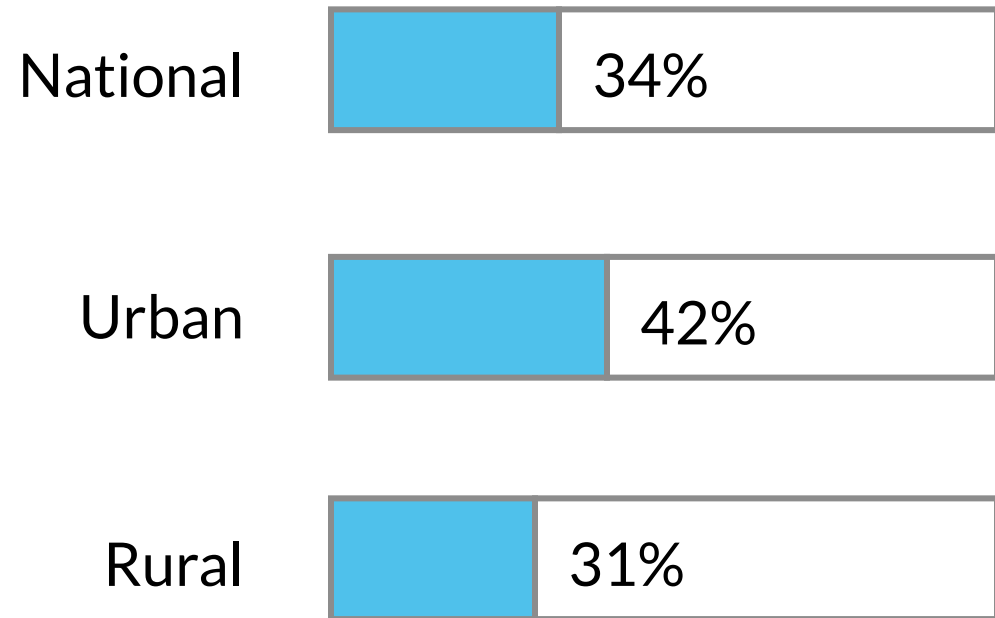
## Quality of Drinking Water at the Source (All Sources)



Proportion of uncontaminated drinking water at source by Area of Residence



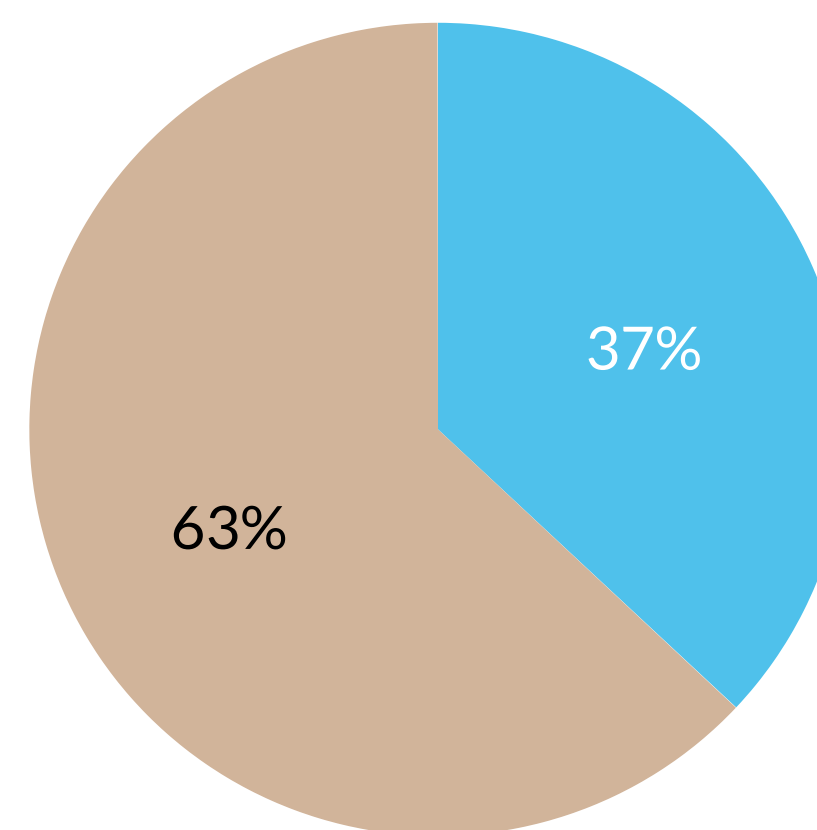
Not Contaminated (34%)  
Contaminated (66%)



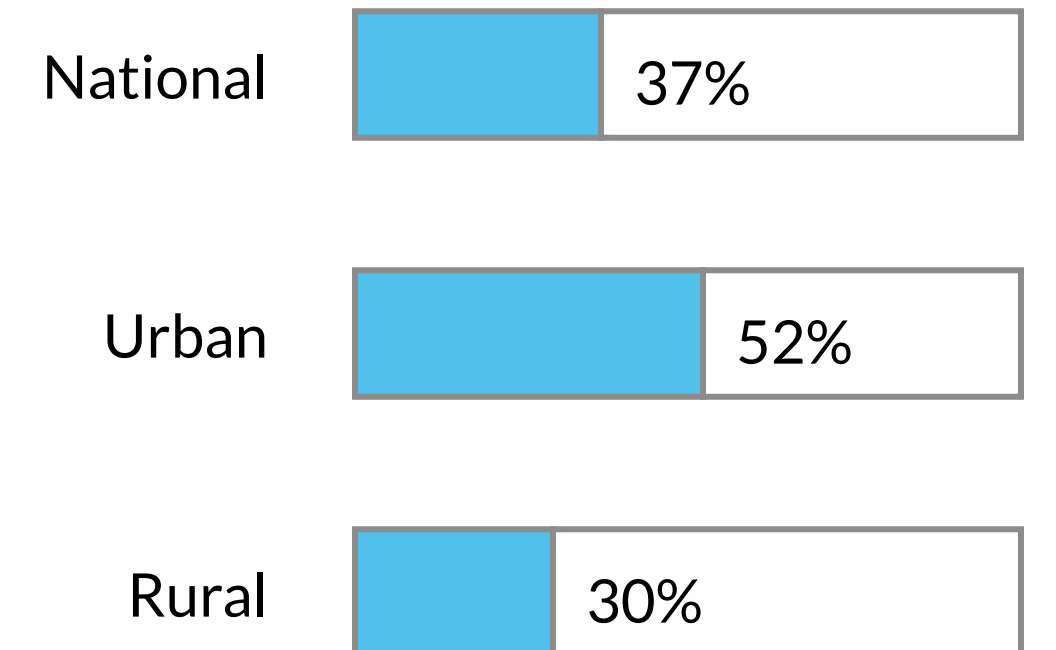
## Quality of Drinking Water at the Point of Consumption



Proportion of uncontaminated drinking water at point of consumption by Area of Residence



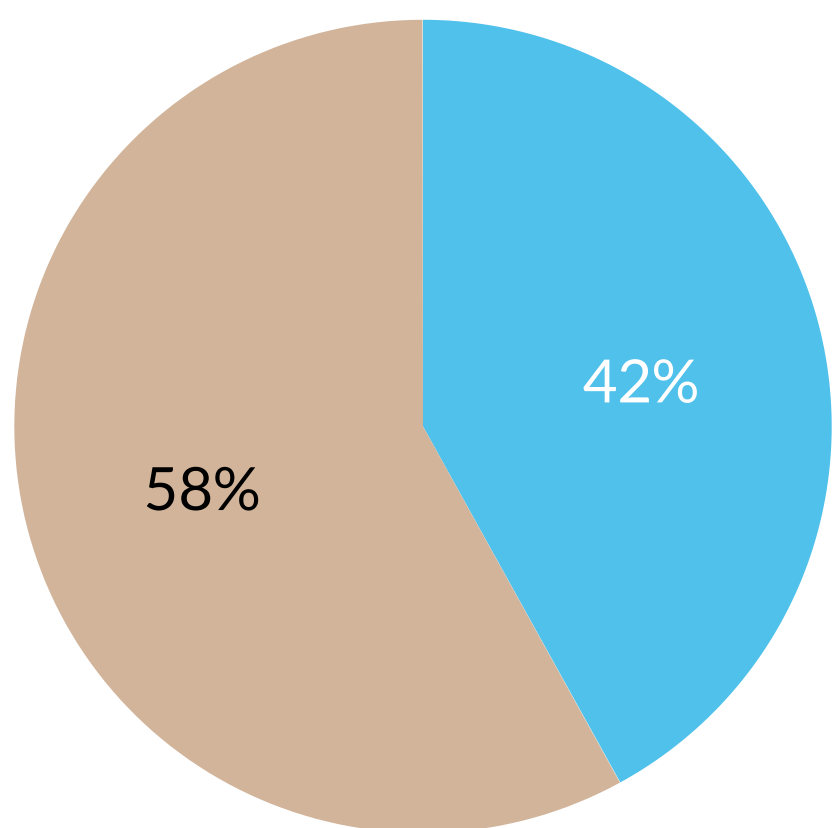
Not Contaminated (37%)  
Contaminated (63%)



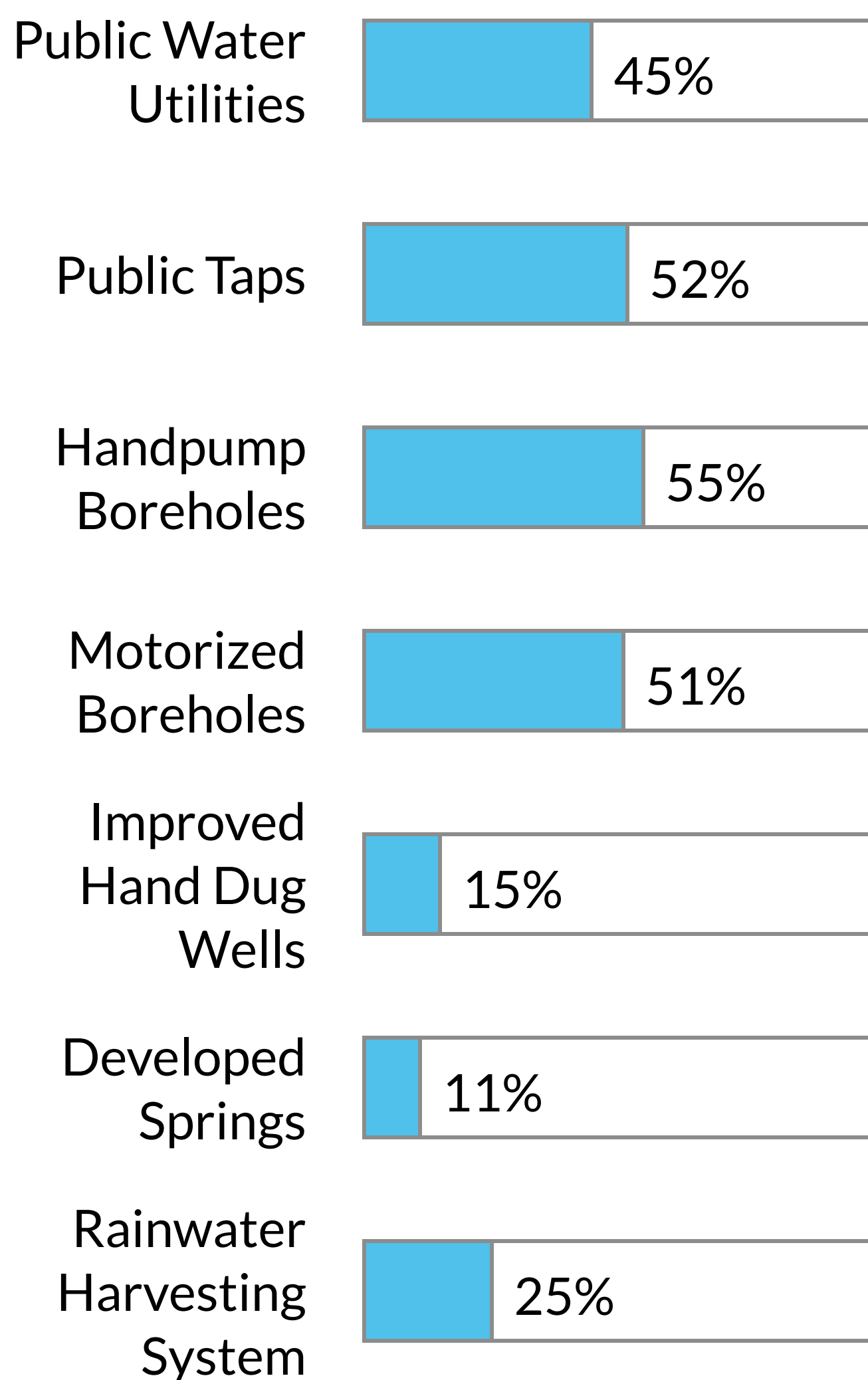
## Quality of Improved Drinking Water Sources

Proportion of uncontaminated improved drinking water sources by household's facility type

More than half of all improved drinking water sources are contaminated.

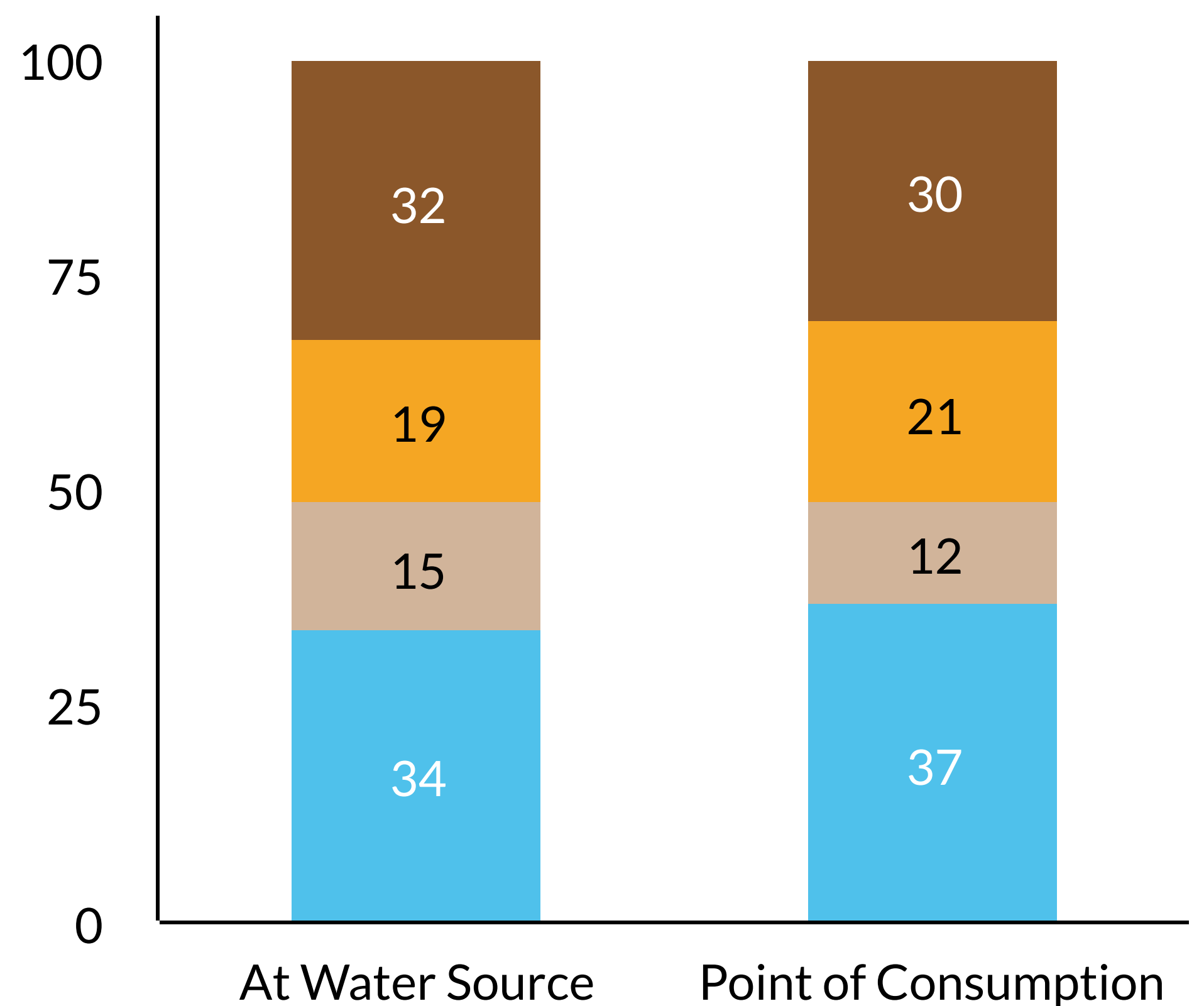


No Contamination (42%)  
Contaminated (58%)



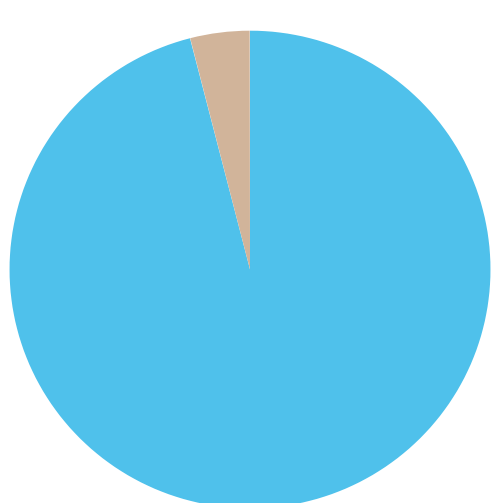
## E. Coli Load at Water Source and Point of Consumption

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

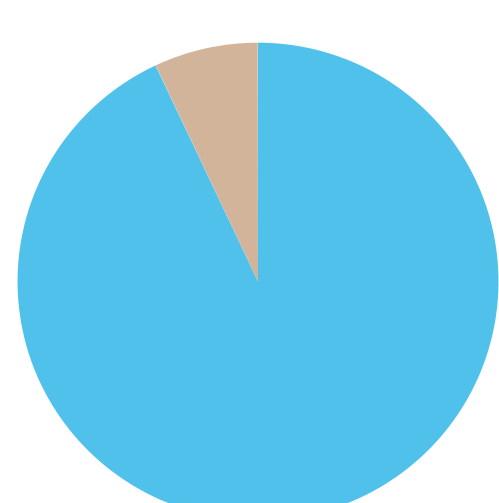


Low (<1 per 100ml)  
Moderate (1 - 10 per 100ml)  
High (11 - 100 per 100ml)  
Very High (>100 per 100ml)

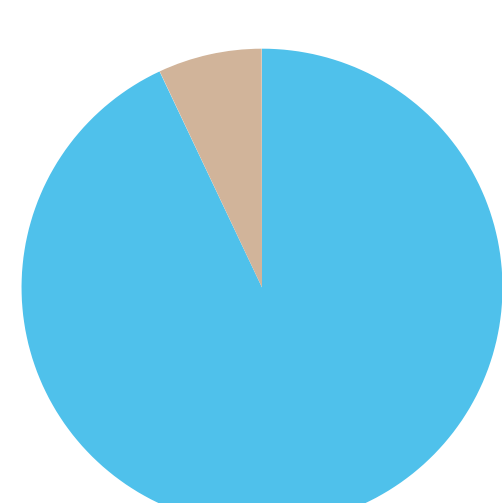
## Organoleptic Tests at Drinking Water Sources



No Odor (96%)  
Has Odor (4%)

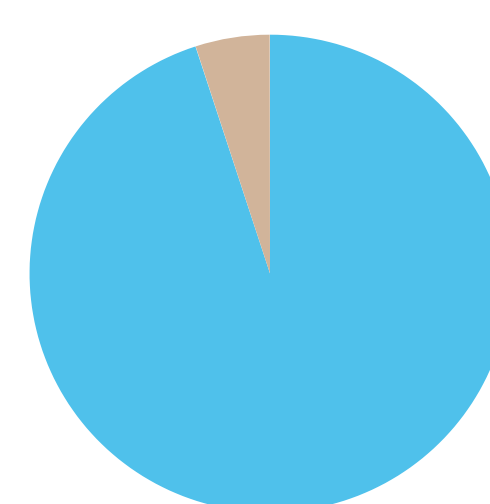


No Color (93%)  
Has Color (7%)

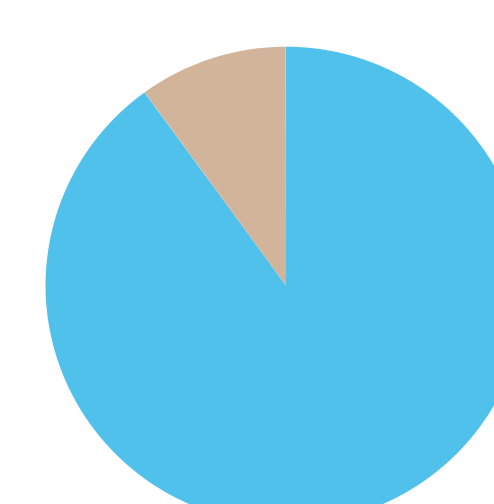


No Turbidity (93%)  
Is Turbid (7%)

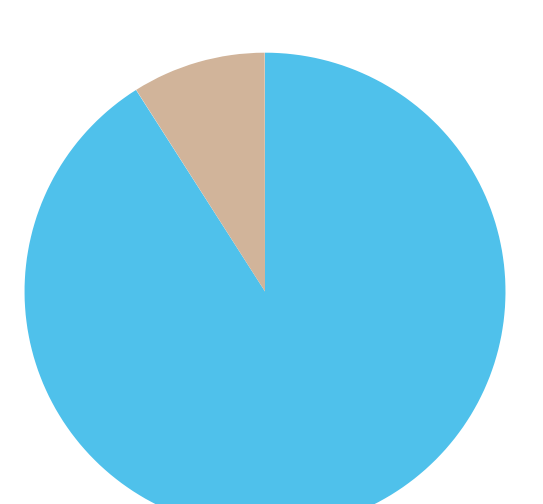
## Organoleptic Tests at Point of Consumption



No Odor (95%)  
Has Odor (5%)



No Color (90%)  
Has Color (10%)



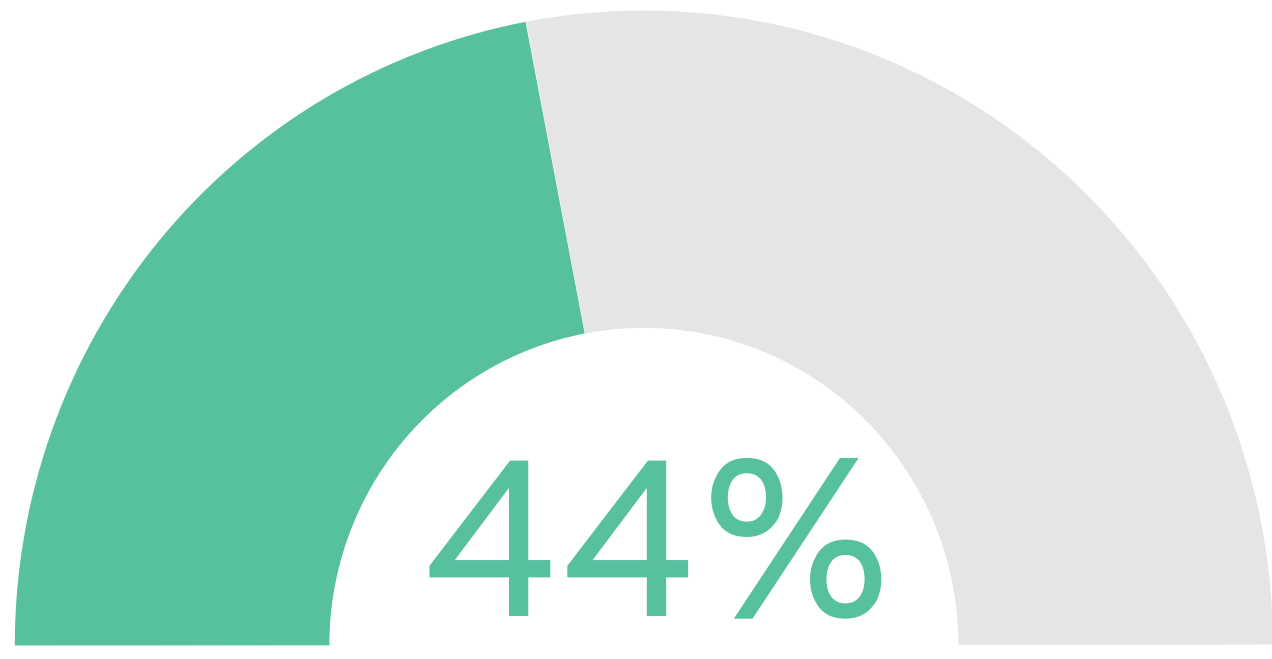
No Turbidity (91%)  
Is Turbid (9%)



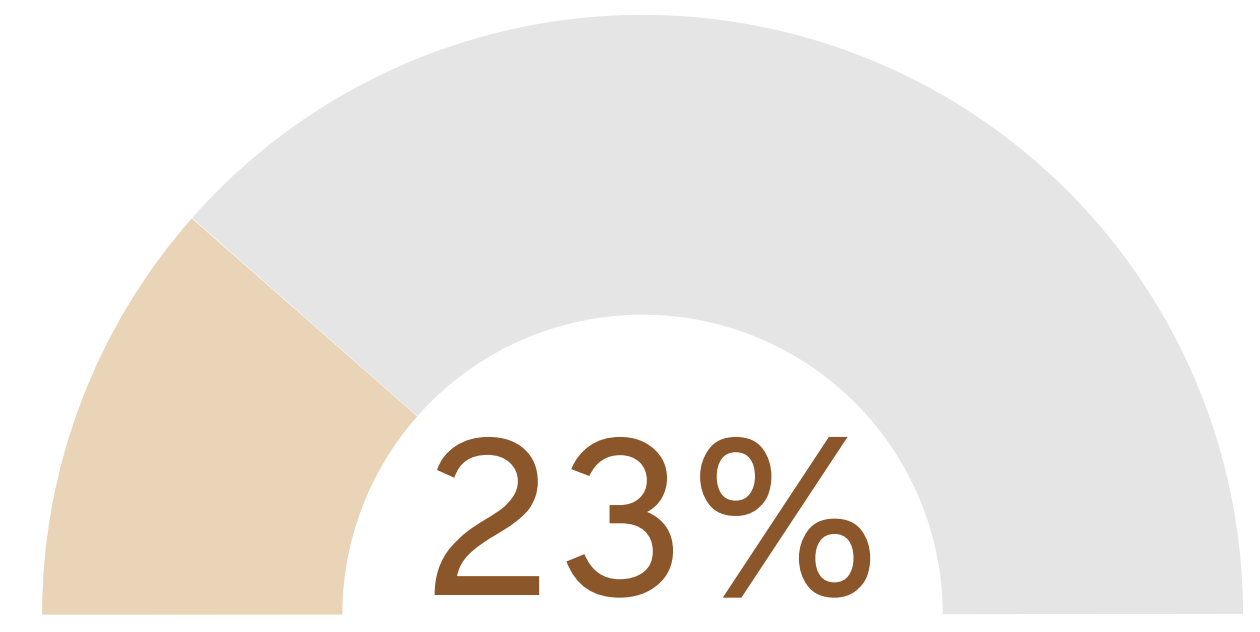
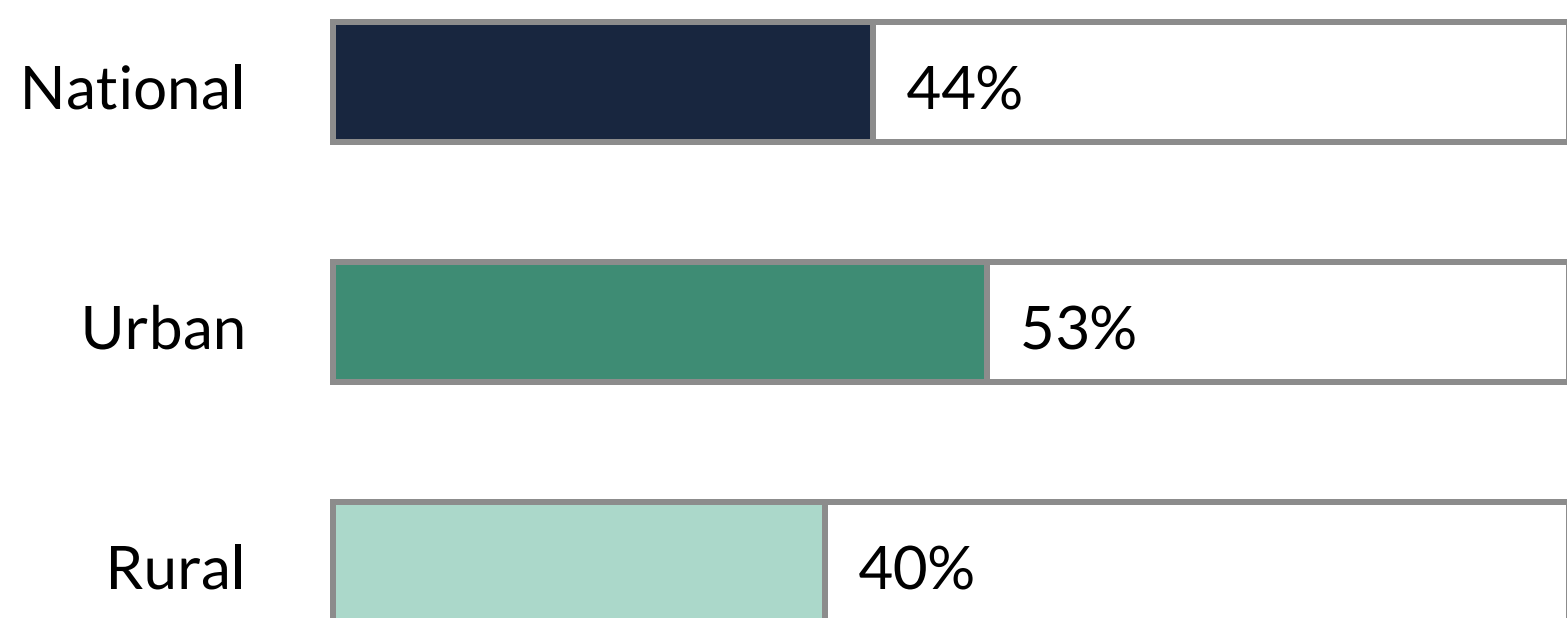
# Access to Basic Sanitation Services



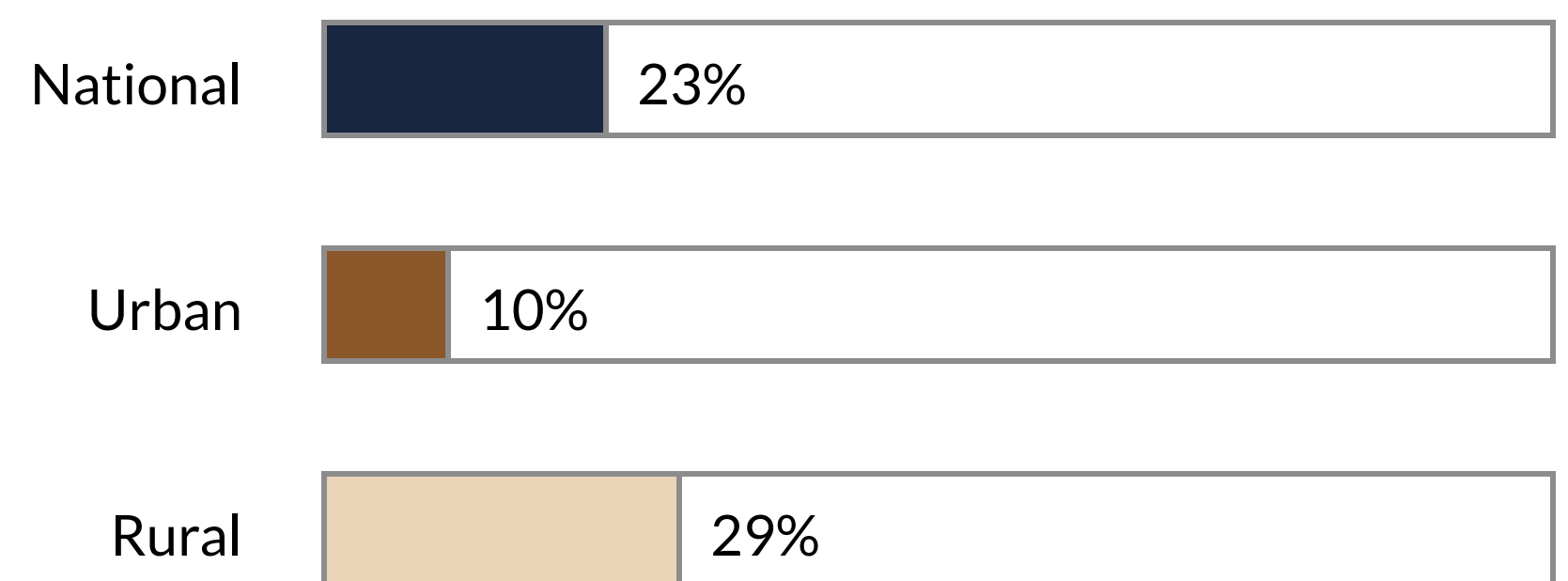
About 44 per cent of the population have access to basic sanitation services, while 23 per cent of Nigerians continue to practice open defecation. In comparison 2018 WASH NORM data, there has been little progress in the achievement of universal access to basic sanitation services.



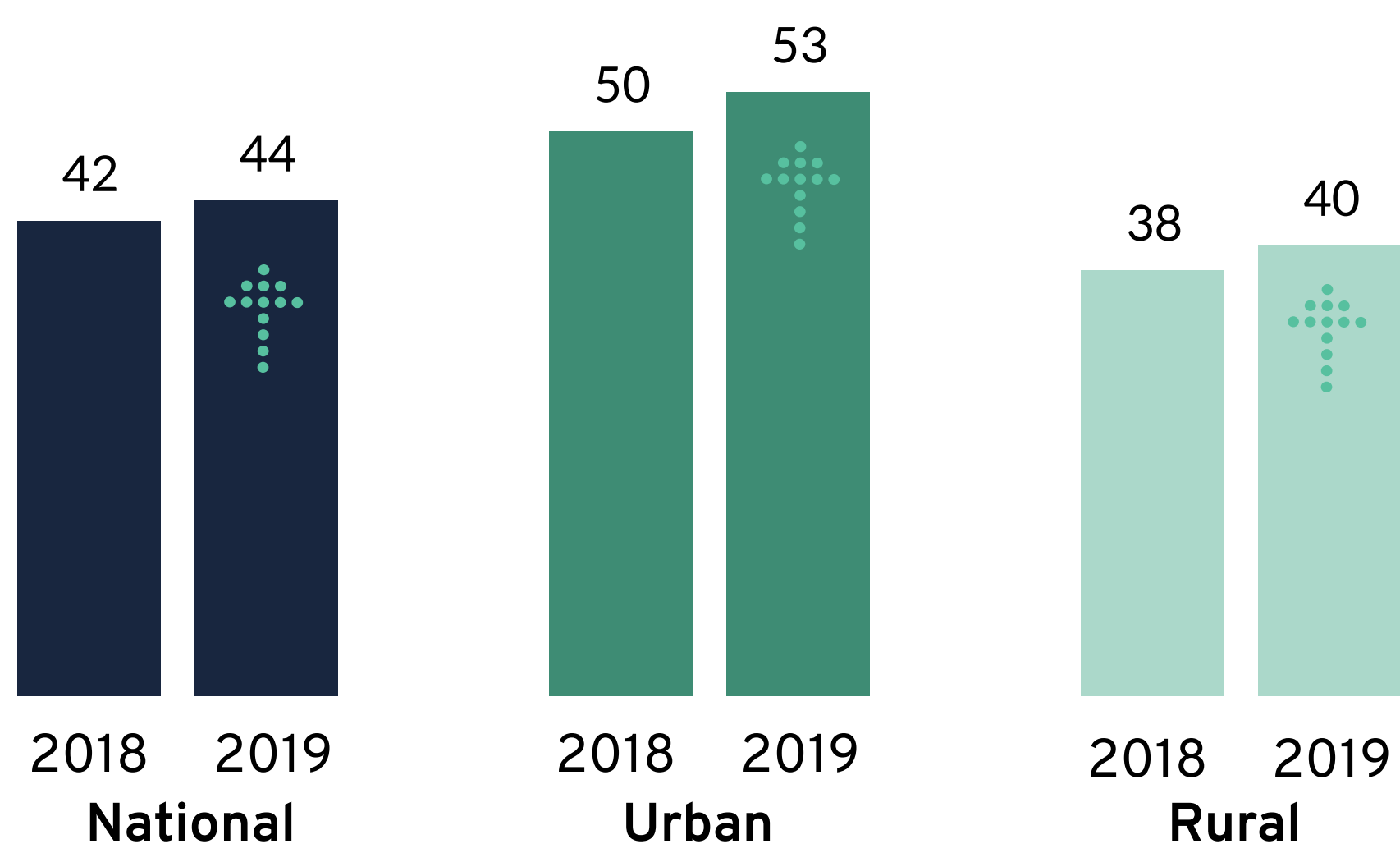
Have access to basic sanitation services



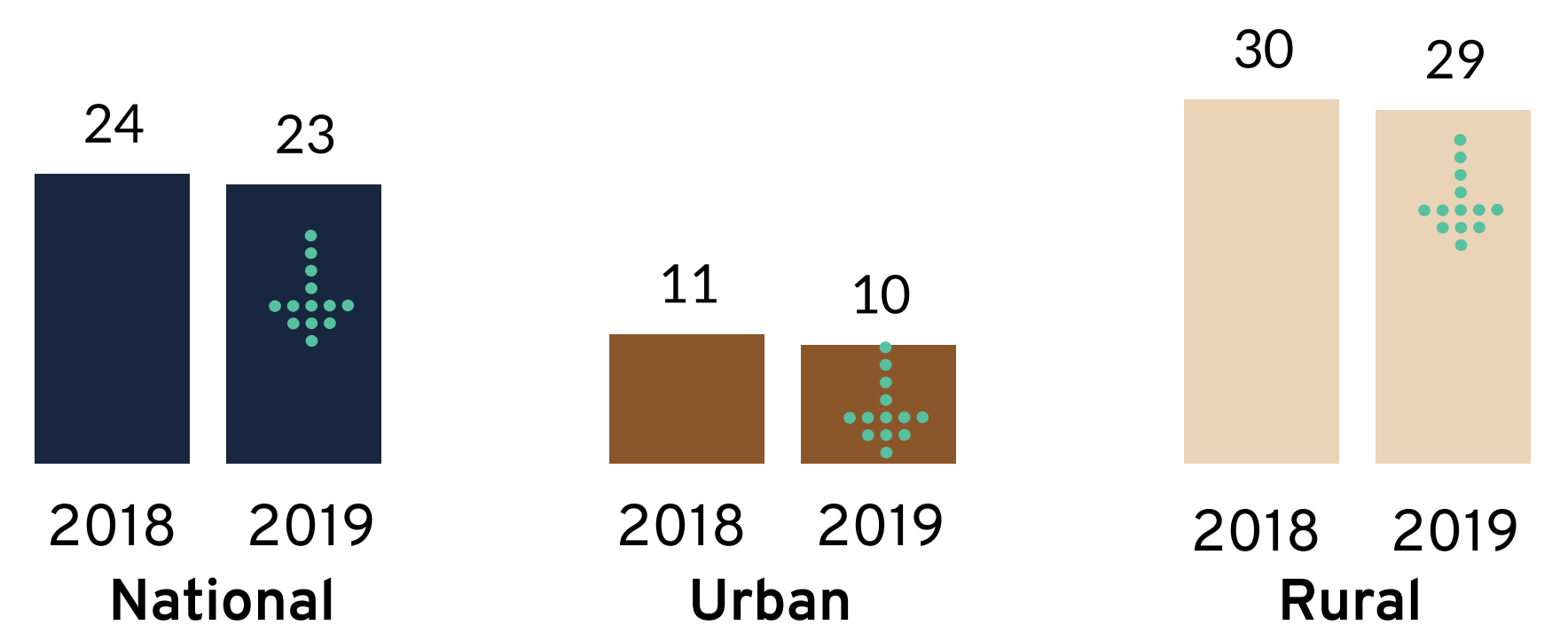
Practice open defecation



Trends in the use of basic sanitation services (2018 - 2019)

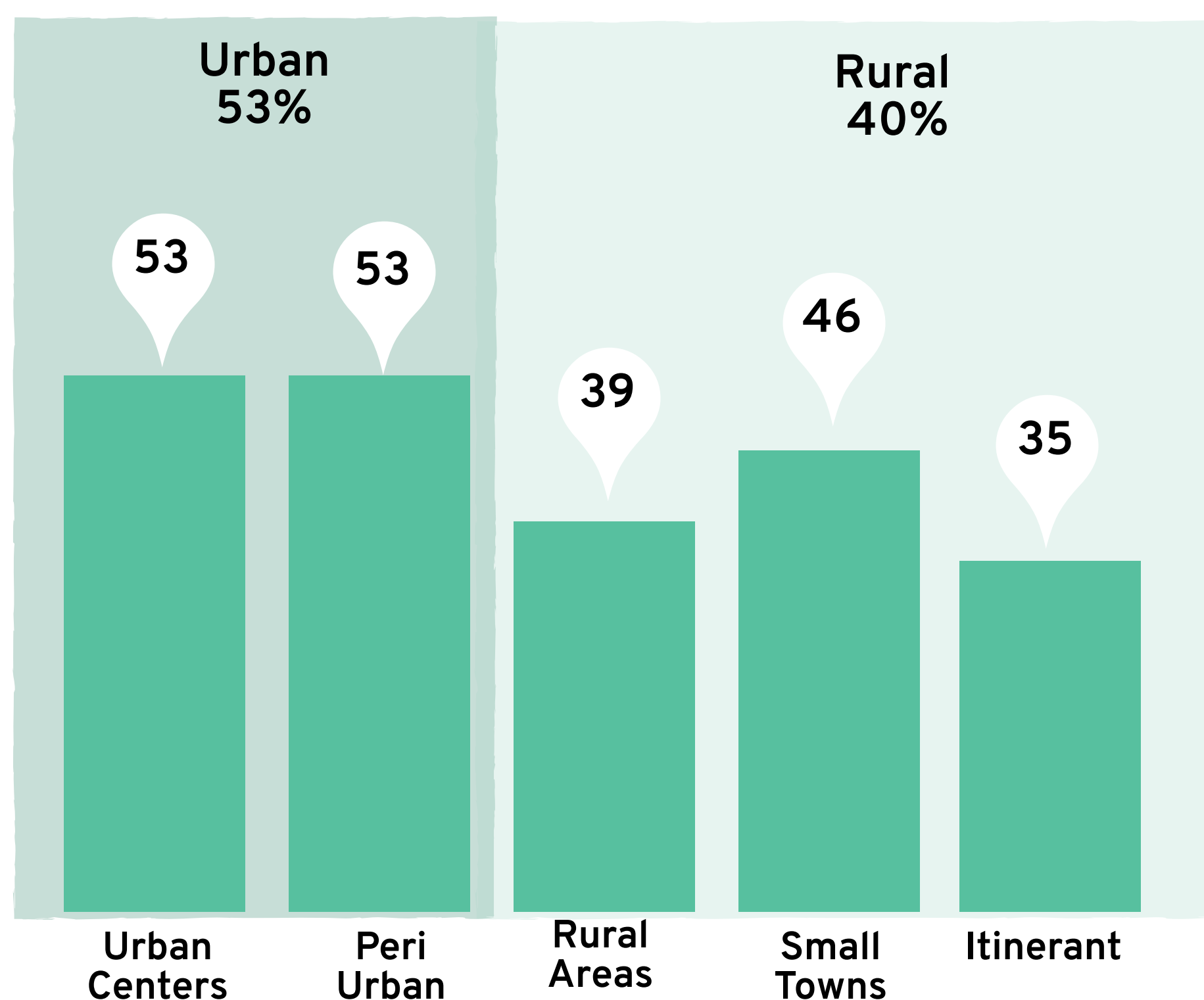


Trends in open defecation (2018 - 2019)

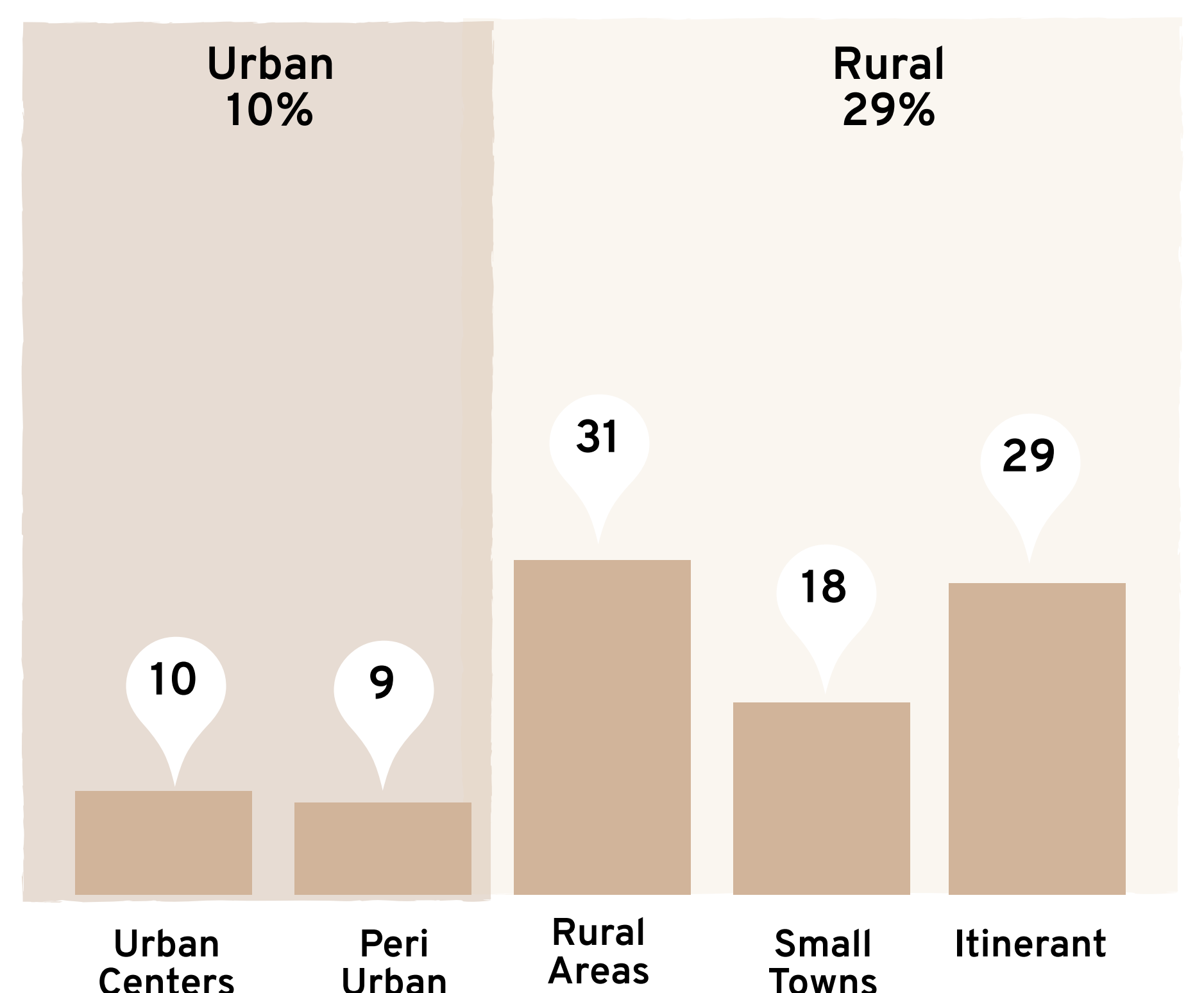


## Equity in Access to Basic Sanitation Services

Access to Basic Sanitation Services by Area of Residence



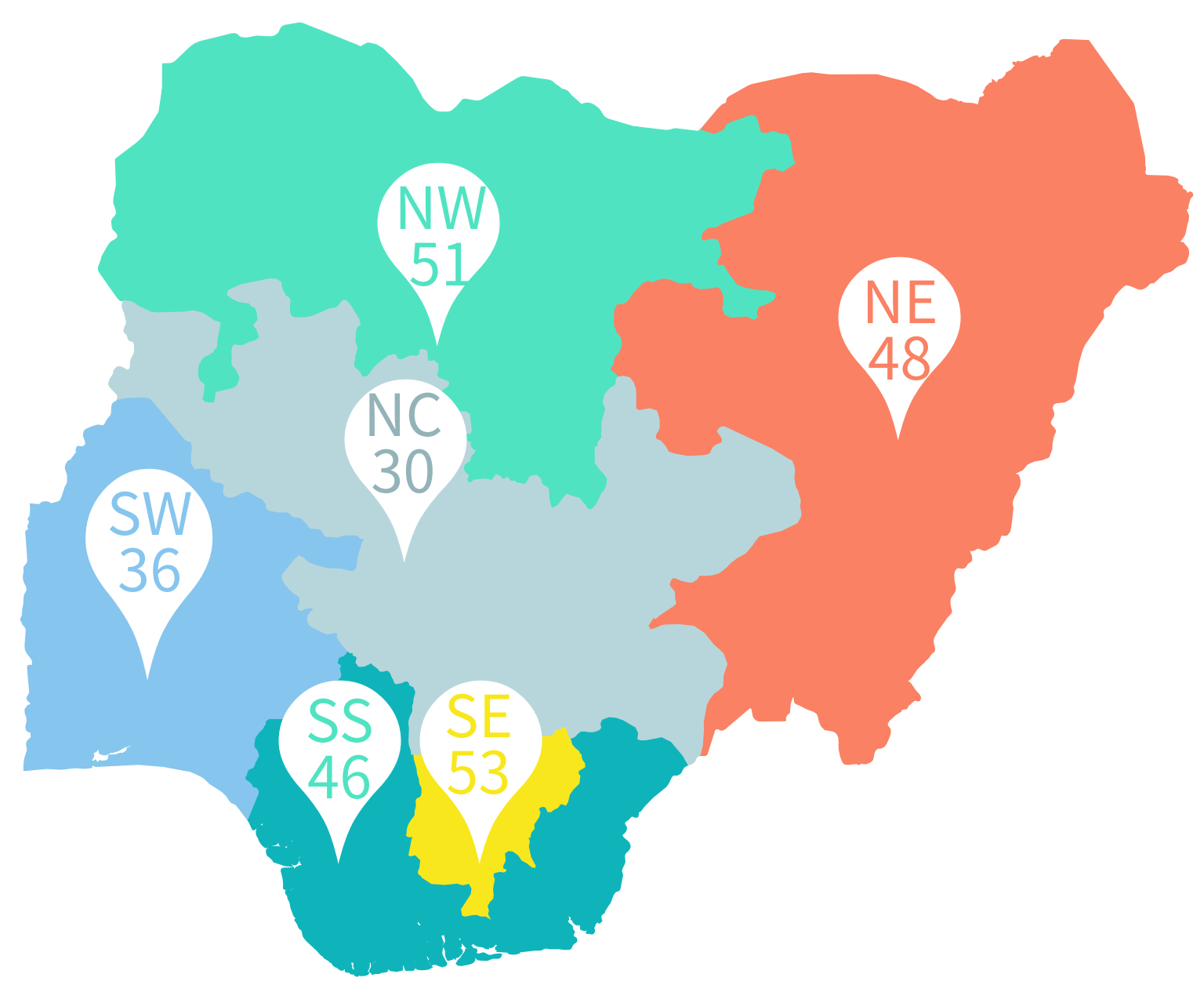
Open Defecation by Area of Residence



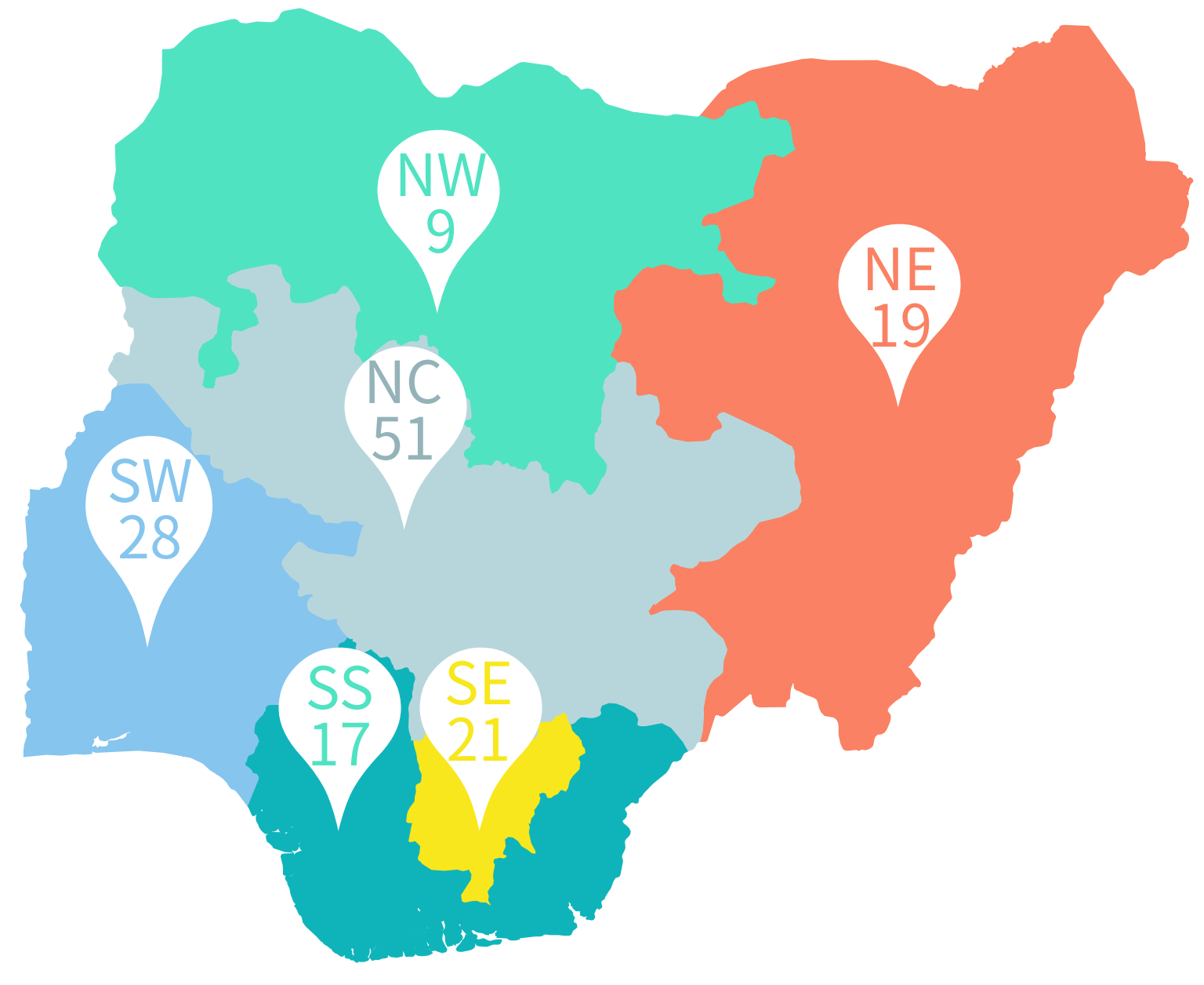


# Equity in Access to Sanitation Services

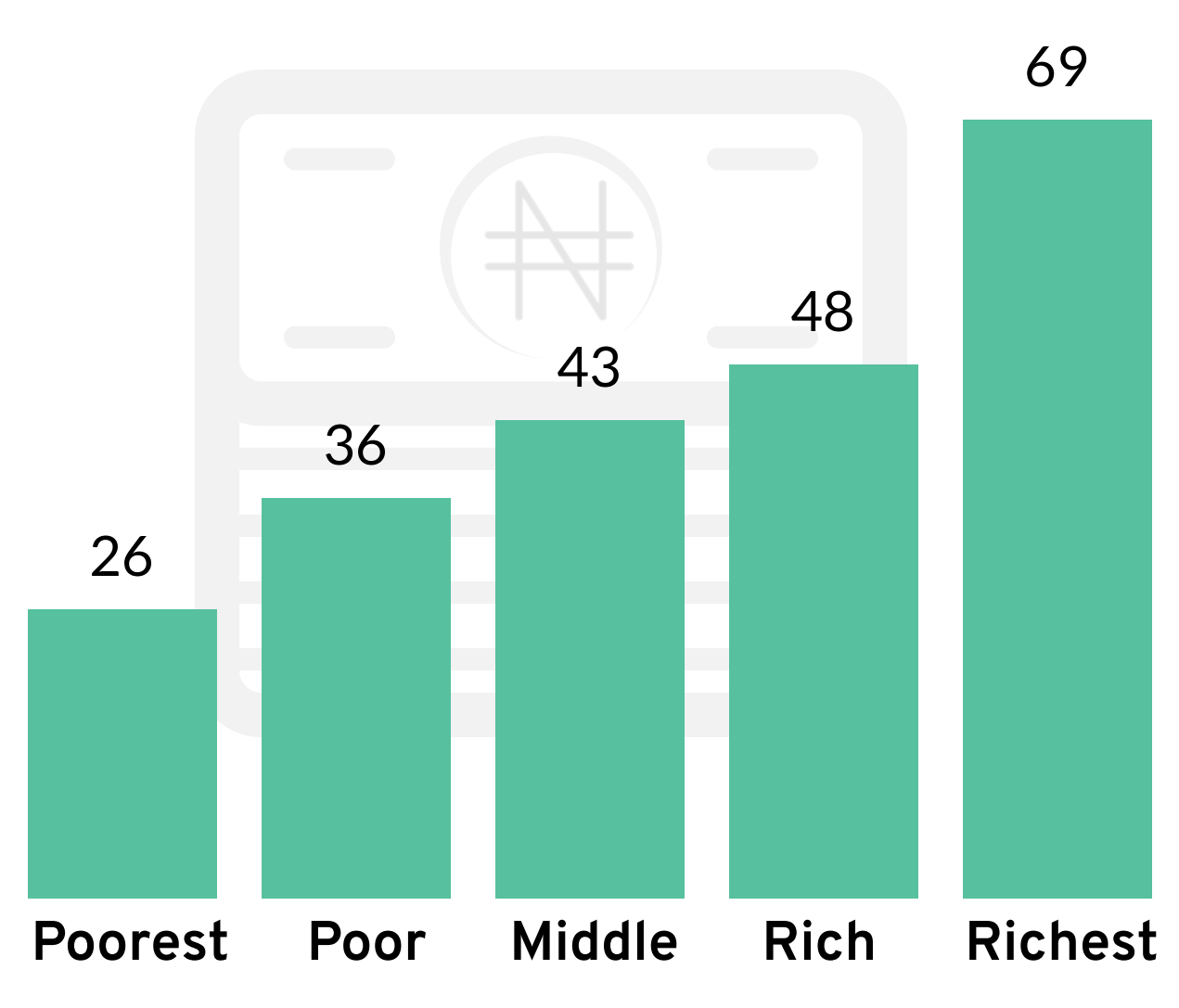
### Access to Basic Sanitation Services by Geopolitical Zones



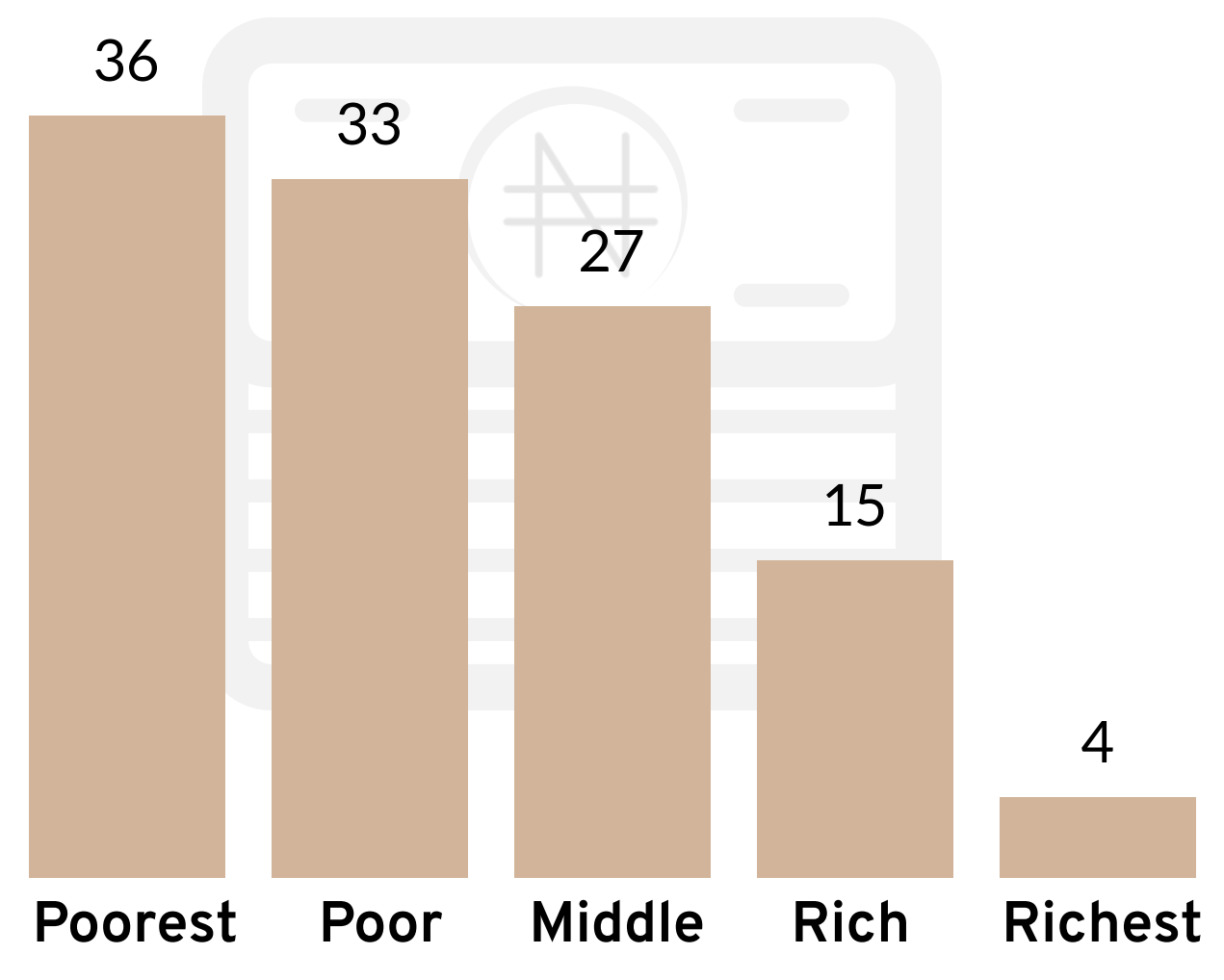
### Open Defecation by Geopolitical Zones



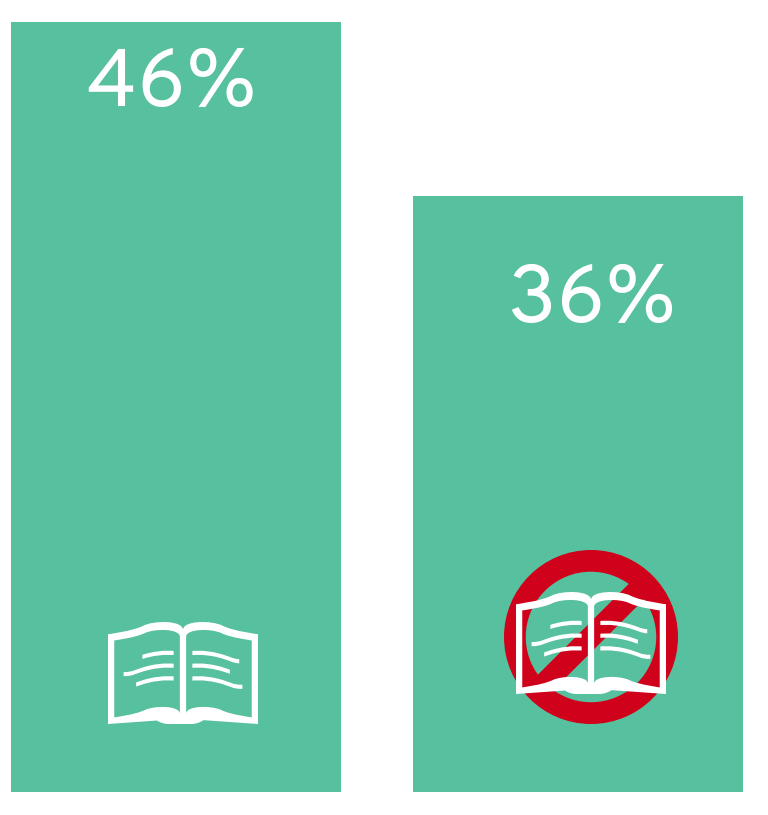
### Access to Basic Sanitation Services by Wealth Quintiles



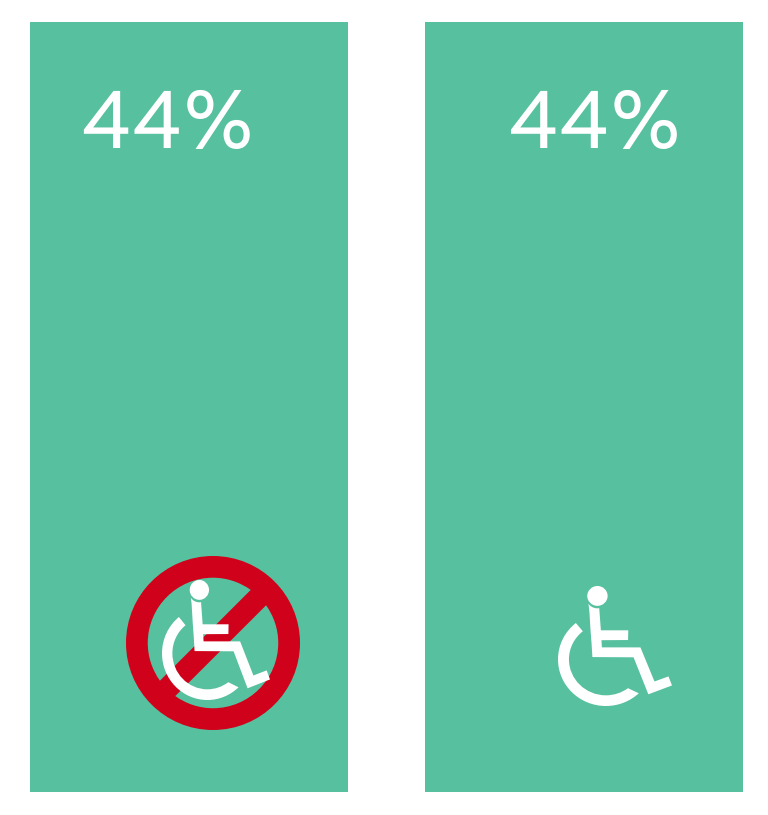
### Open Defecation by Wealth Quintiles



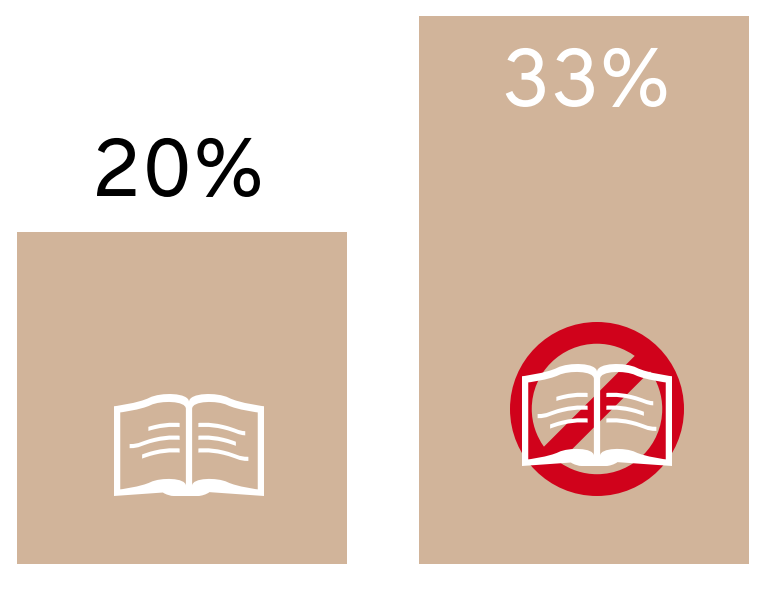
### Access to Basic Sanitation Services by Education of Household Head (Literate vs. Non-Literate)



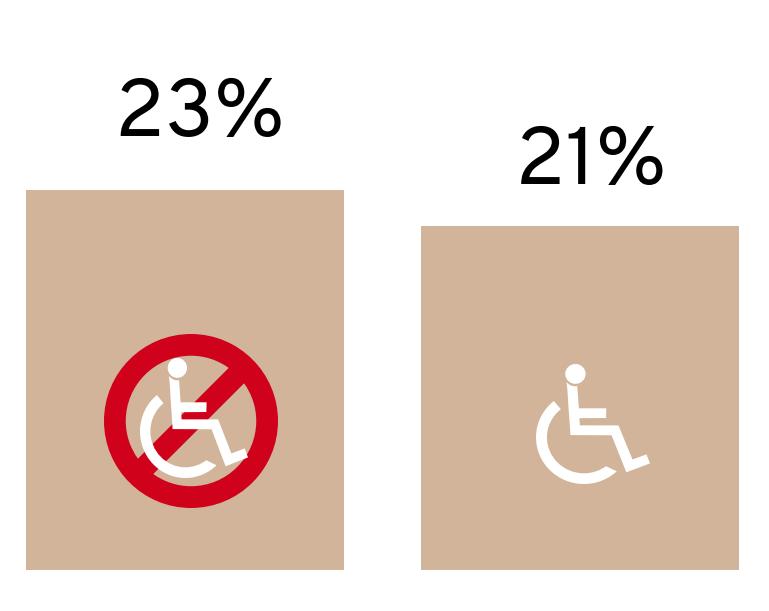
### Access to Basic Sanitation Services by Households with Persons Living with Disabilities



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



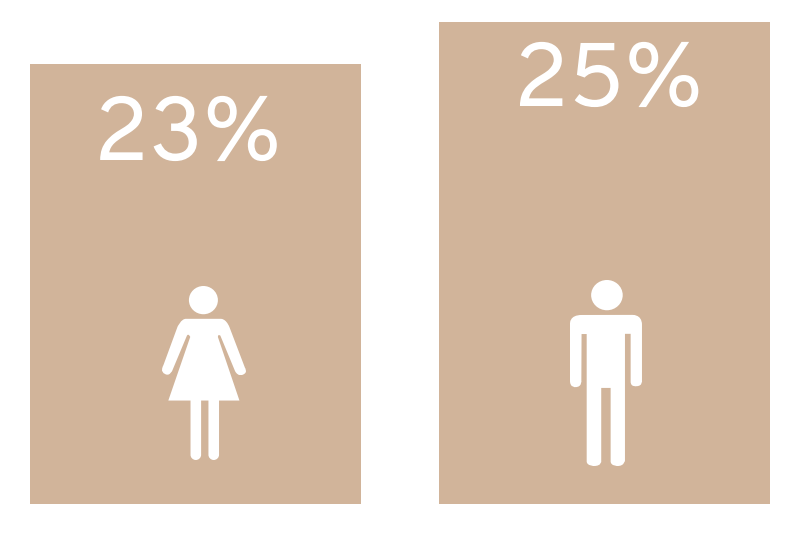
### Open Defecation by Households with Persons Living with Disabilities



### Access to Basic Sanitation Services by Gender of Head of Household



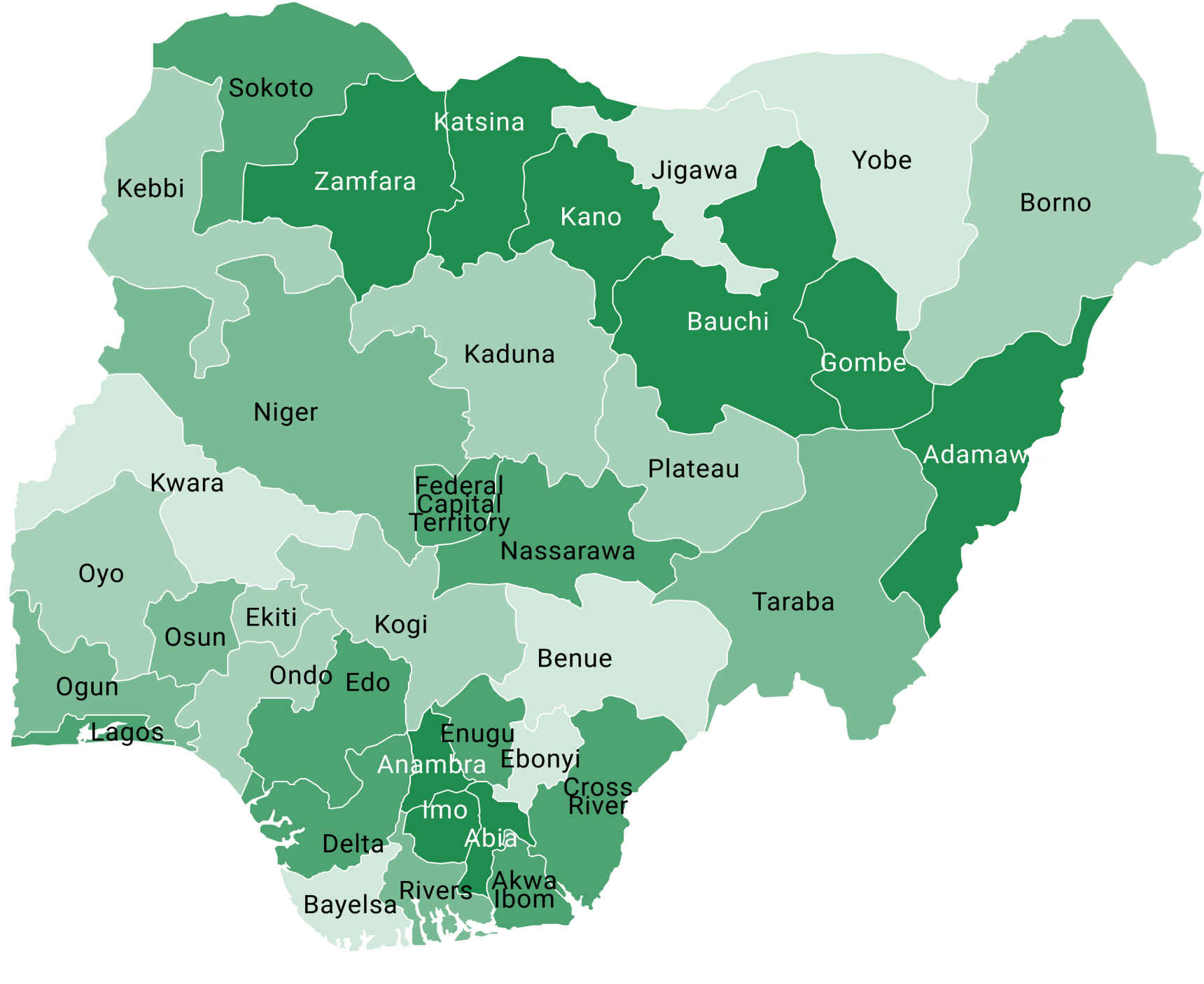
### Open Defecation by Gender of Head of Household





# Equity in Access to Sanitation Services

Access to Basic Sanitation Services

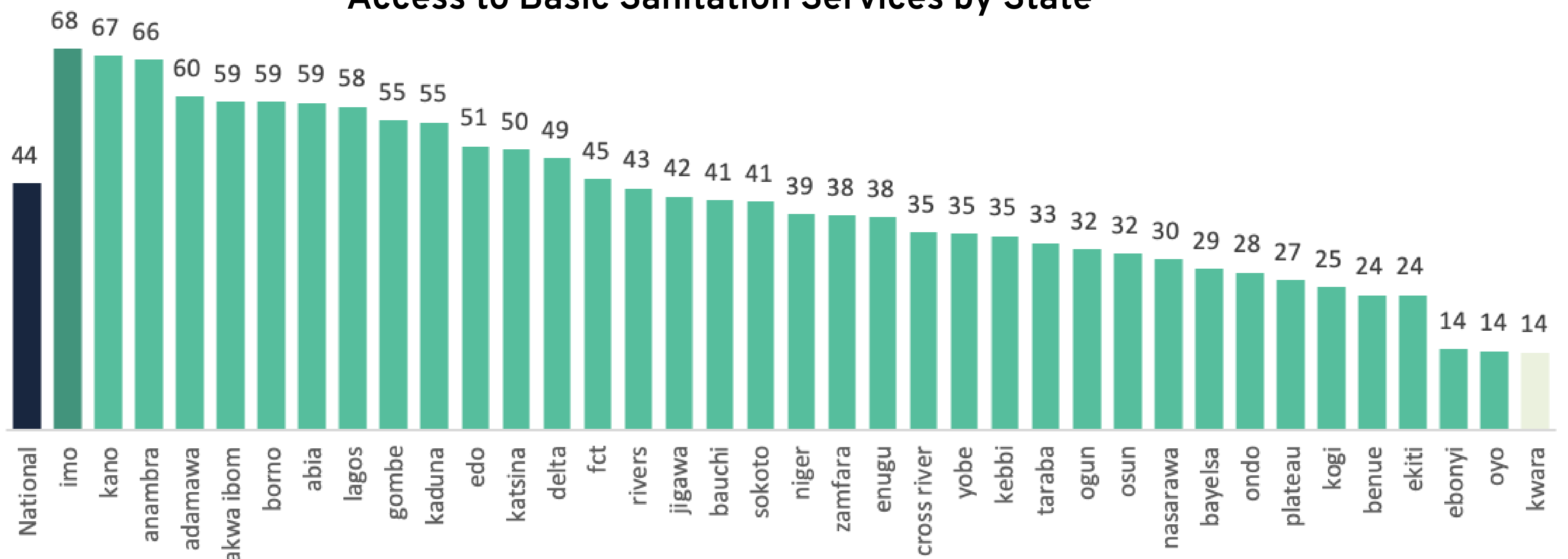


Prevalence of Open Defecation in Nigeria

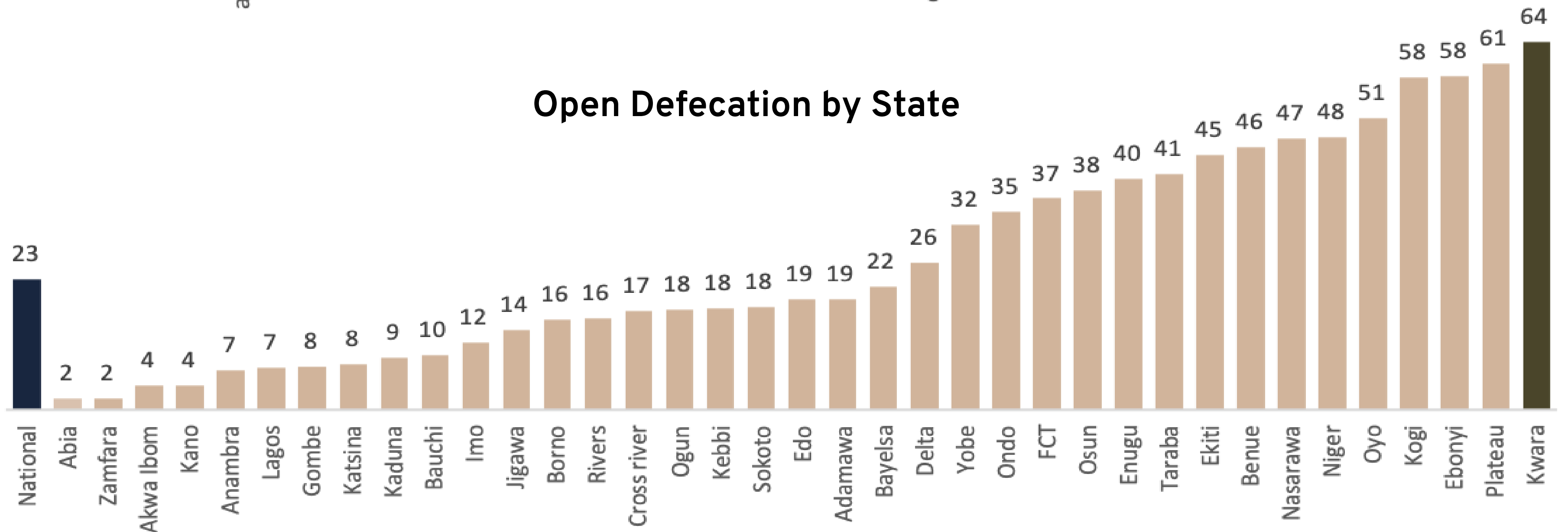


## Access to Basic Sanitation Services and Open Defecation by State

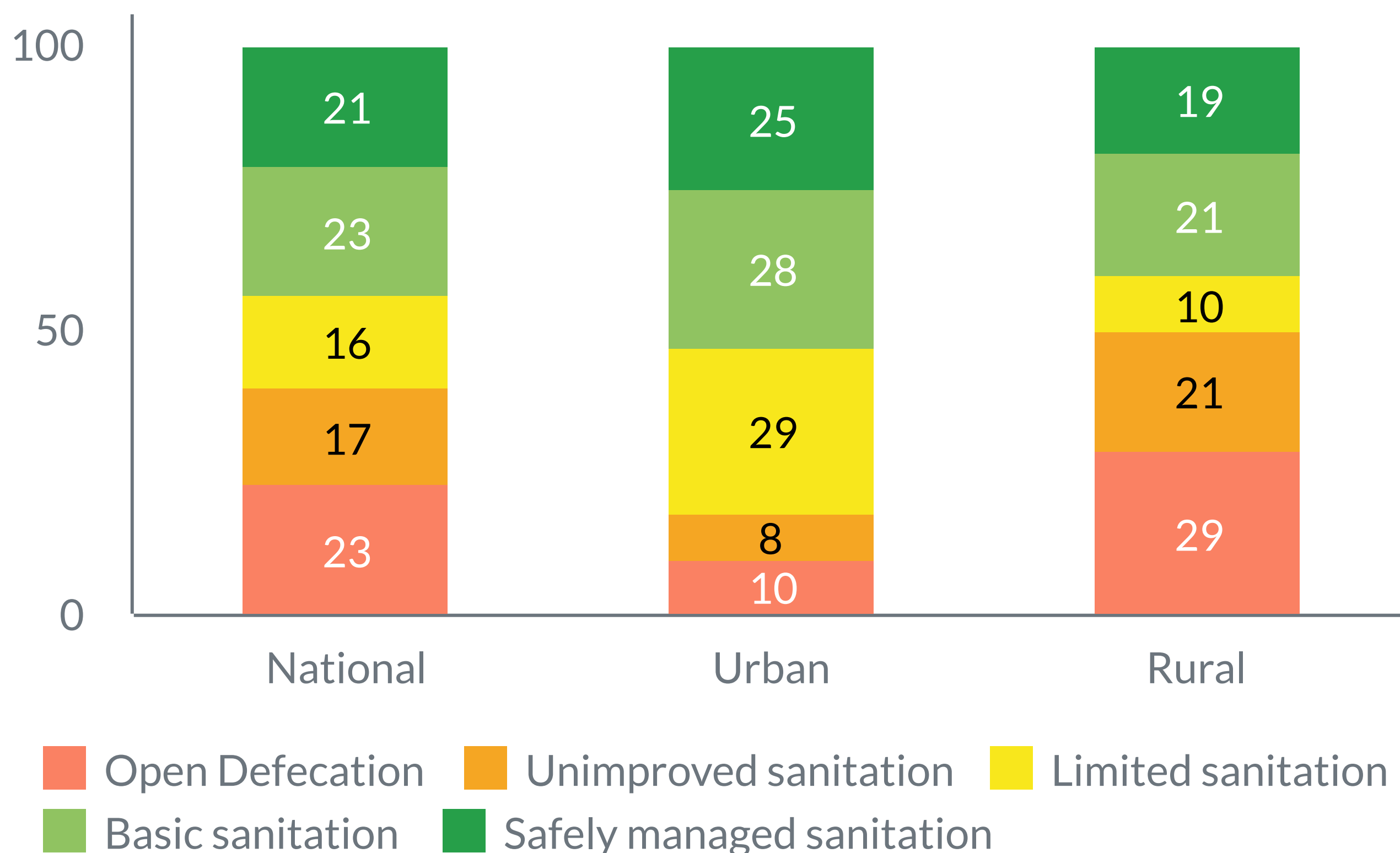
Access to Basic Sanitation Services by State



Open Defecation by State



## Sanitation Services Ladder



Based on WHO/UNICEF JMP definitions,

- **Safely managed services** are improved facilities which are not shared with other households and where excreta 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 bucket latrines
- **Open defecation** is disposal of human faeces in fields, forests, bushes, open bodies of water, beaches and other open space



# Hygiene Practices in Nigeria

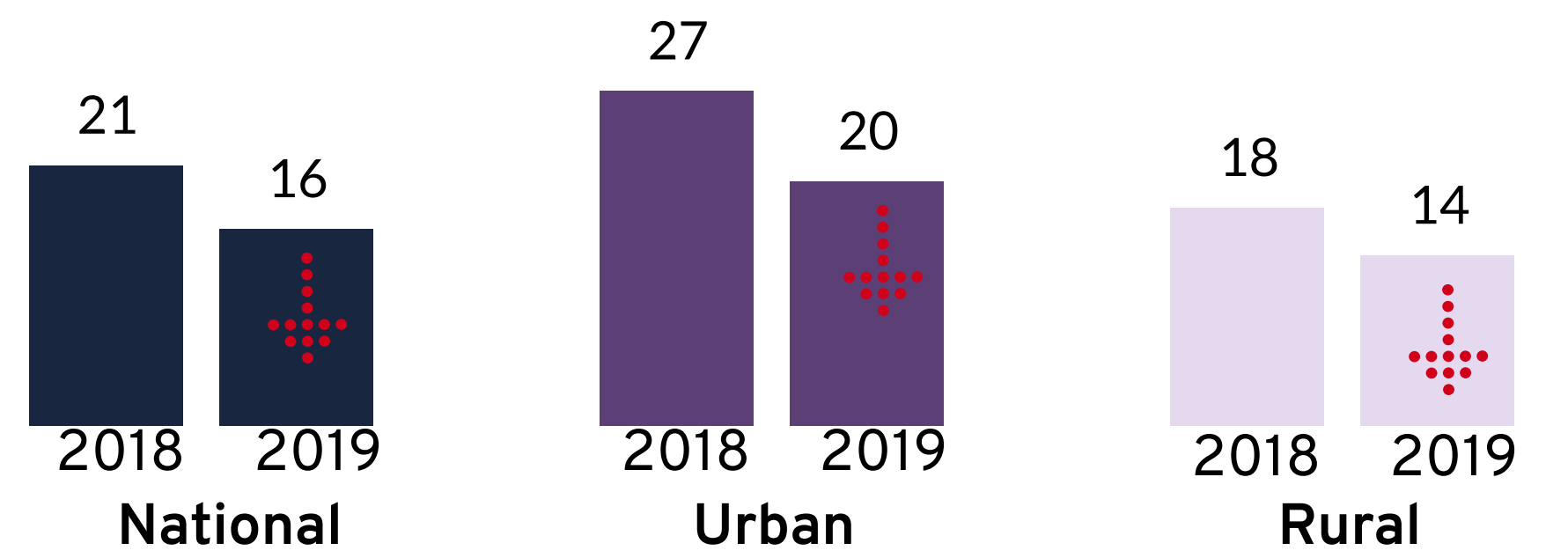


Only 16 per cent of Nigerians have access to basic sanitation services, a 5 percentage point decline from 2018 NORM findings.



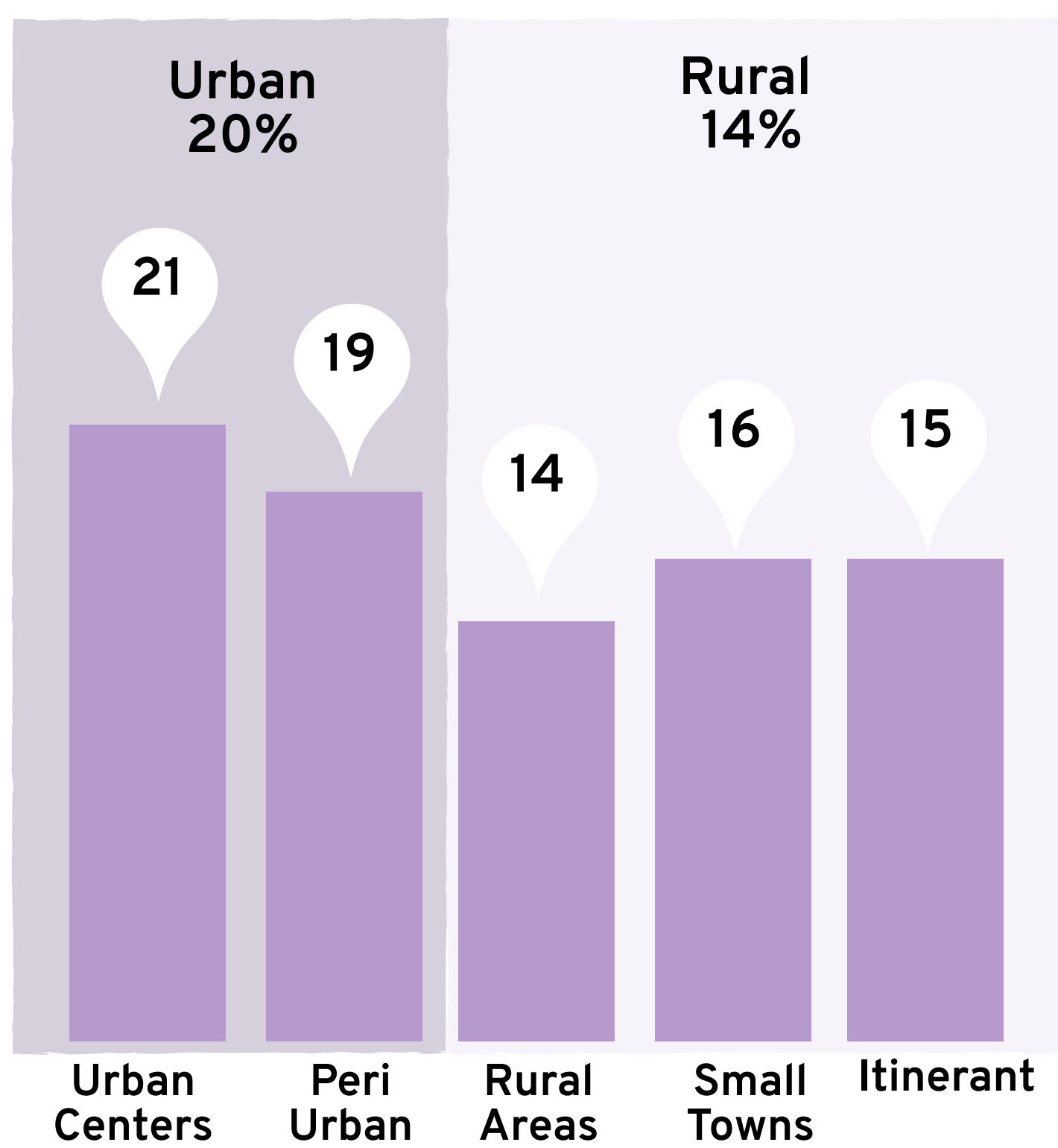
**16%** have access to basic hygiene services

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

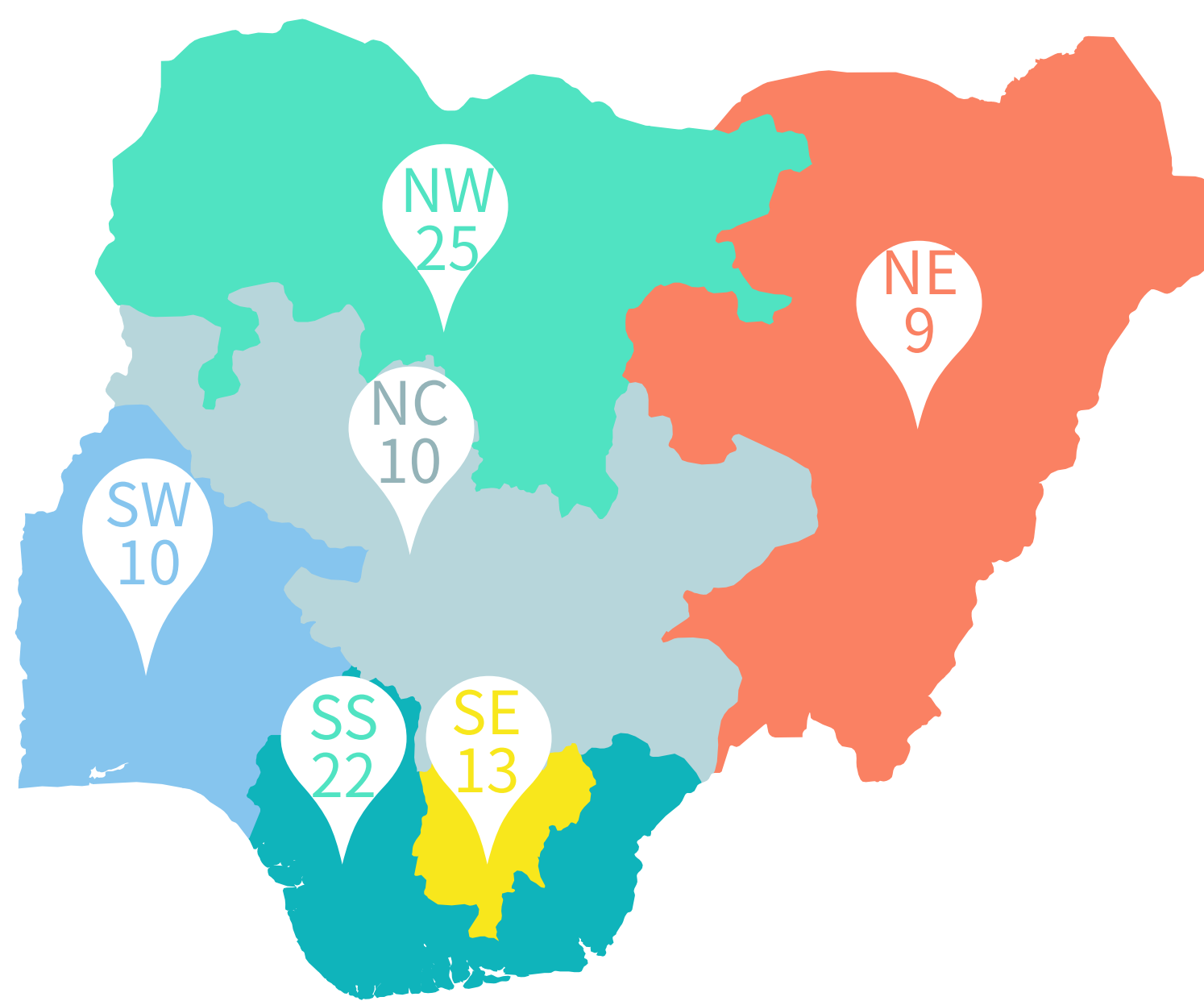


## Equity in Access to Hygiene Service

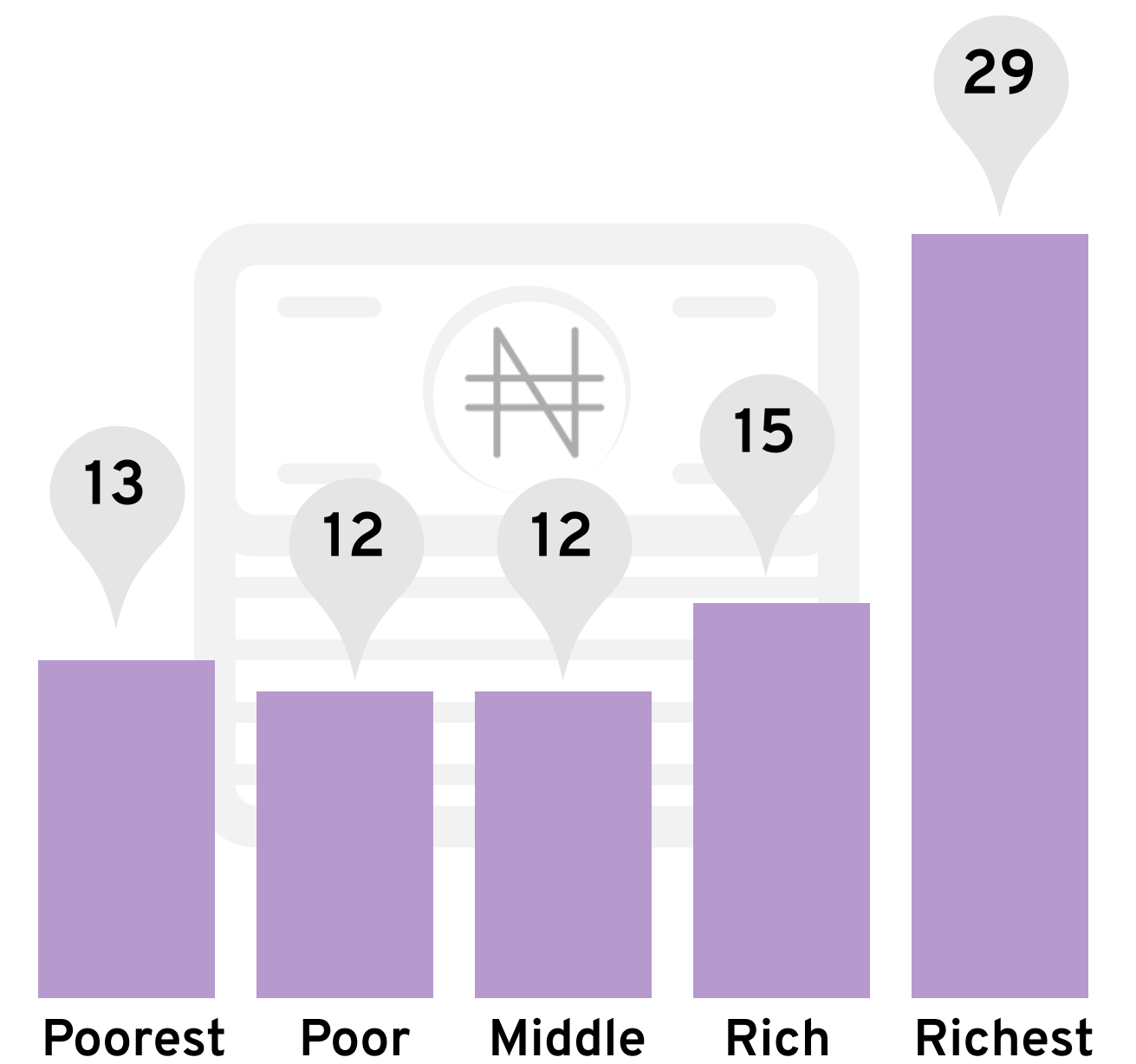
### Access to Basic Hygiene Services by Area of Residence



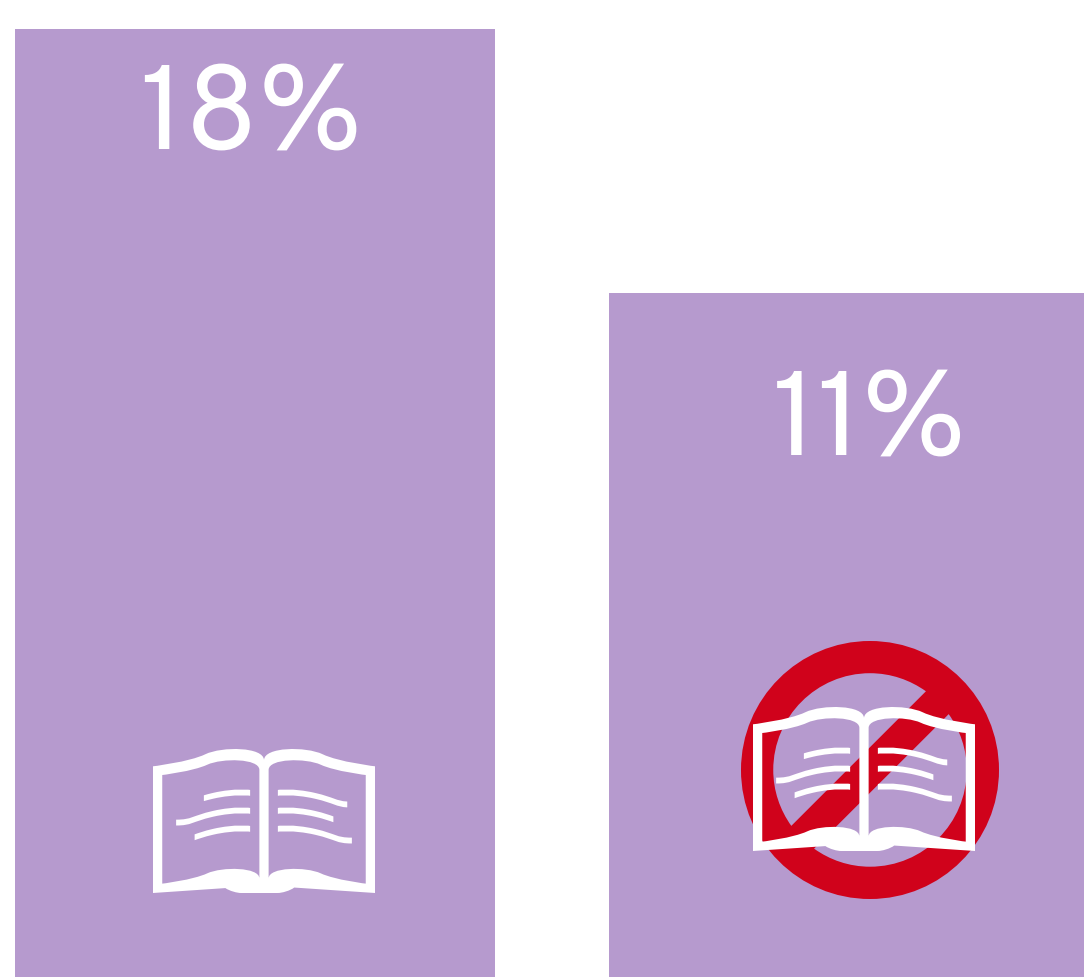
### Access to Basic Hygiene Services by Geopolitical Zones



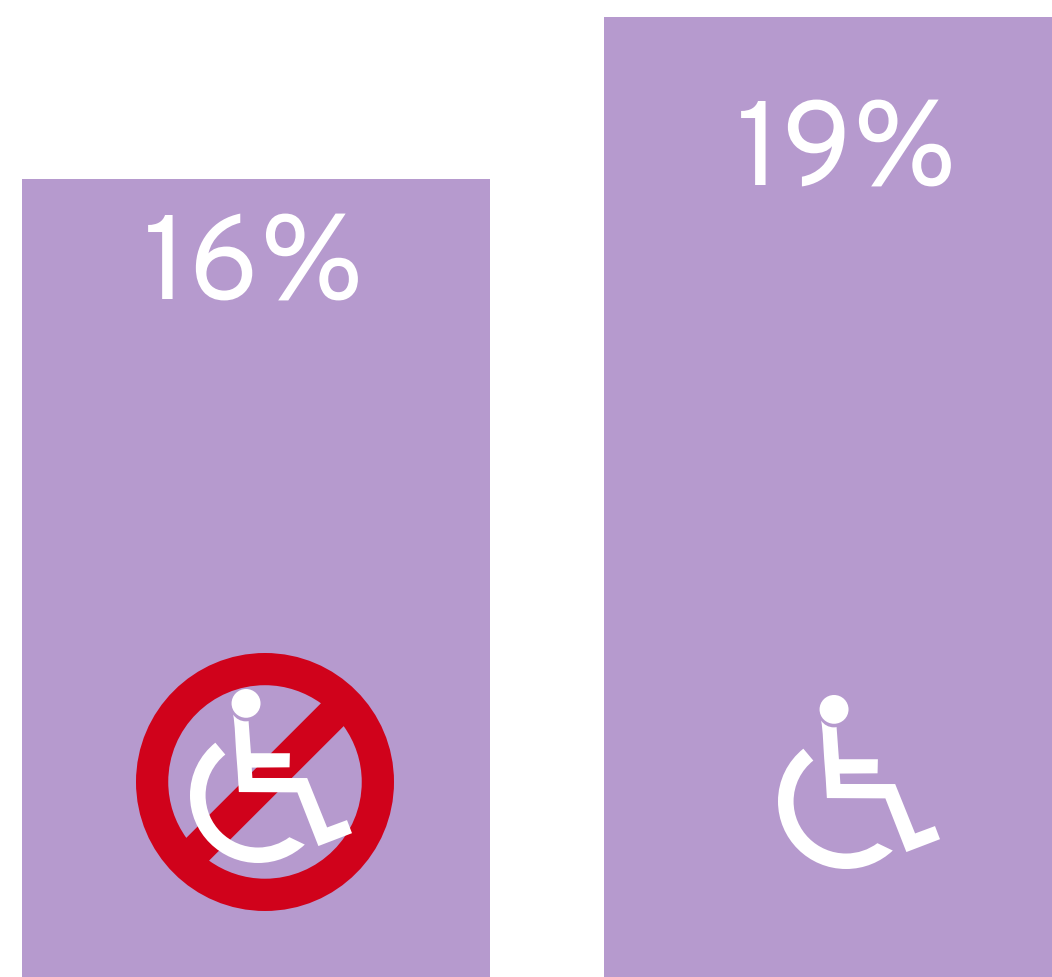
### Access to Basic Hygiene Services by Wealth Quintiles



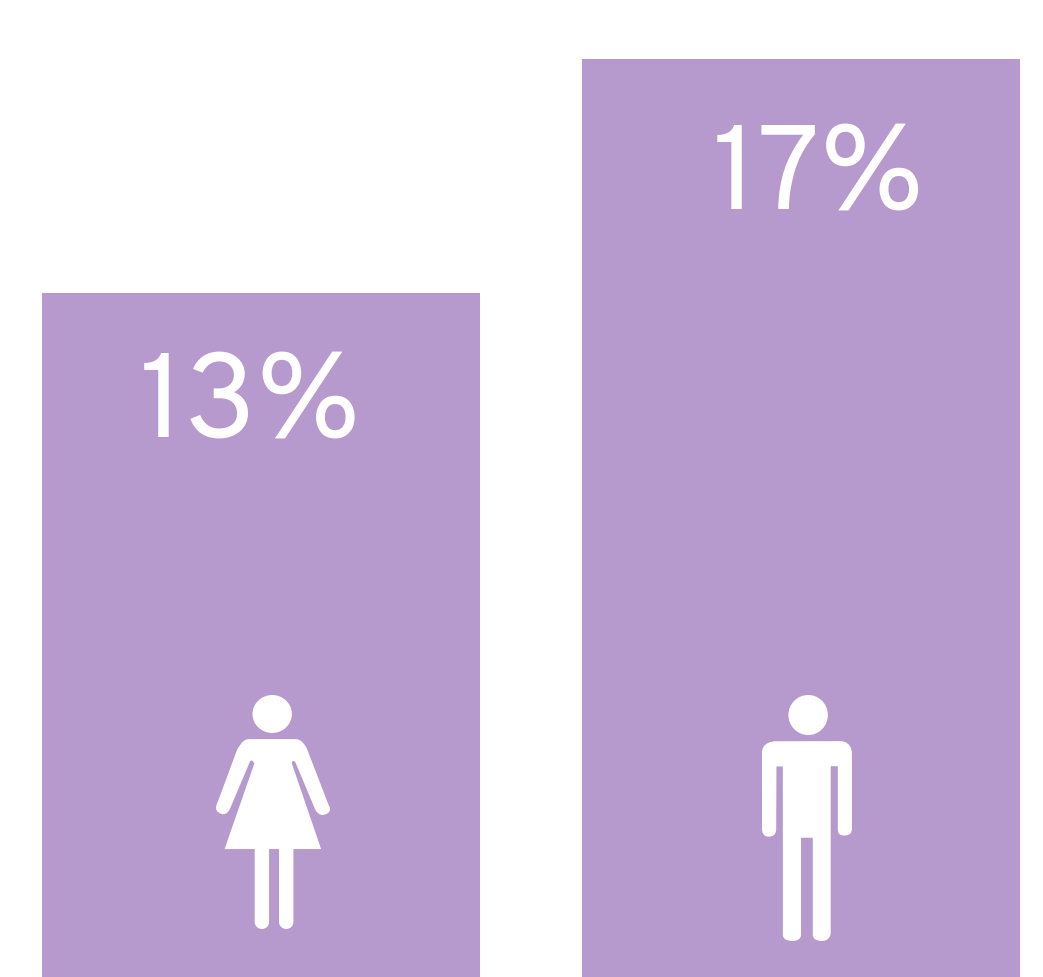
### Access to Basic Hygiene Services by Education of Household Head (Literate vs. Non-Literate)



### 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

**81%**

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

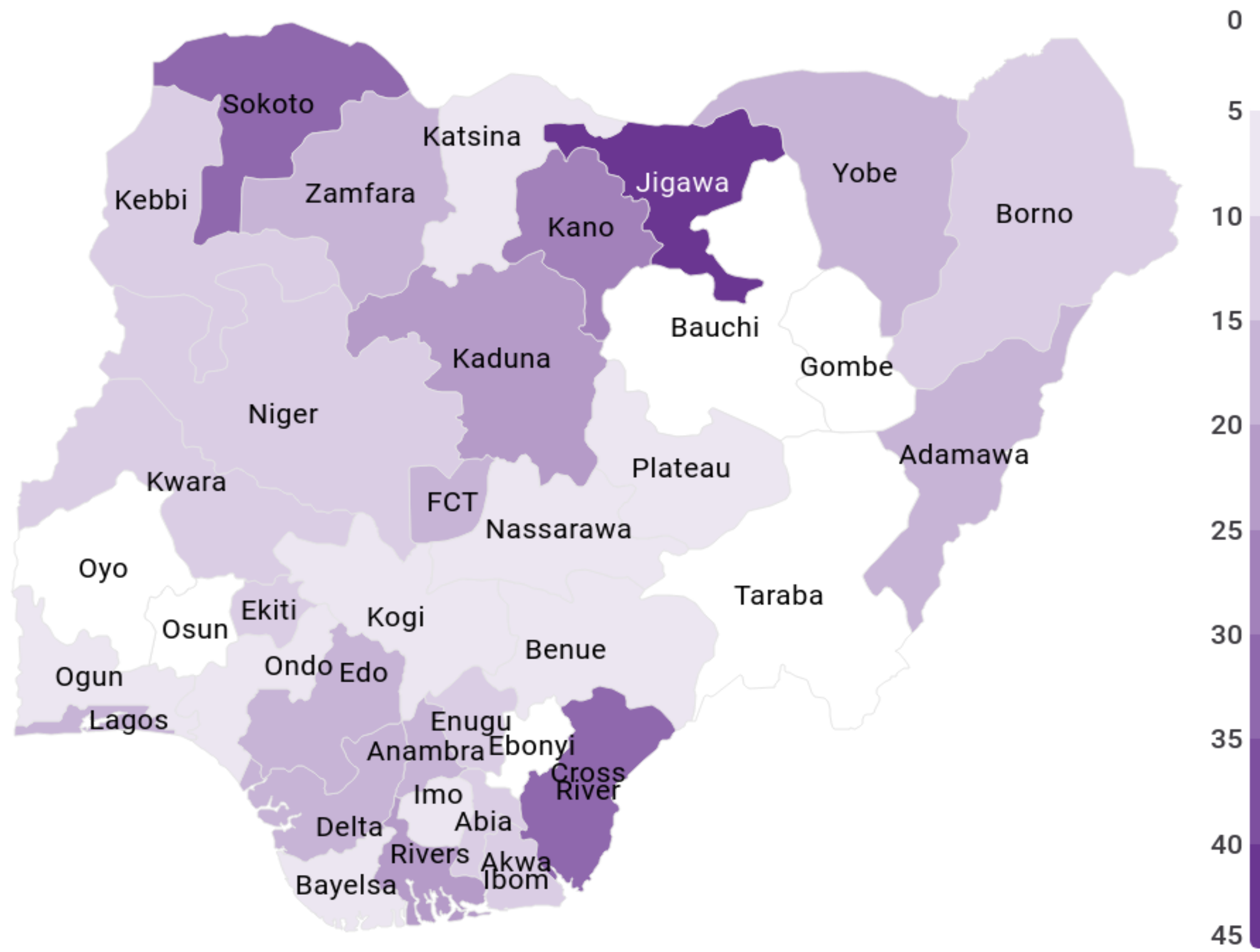
**10%**

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



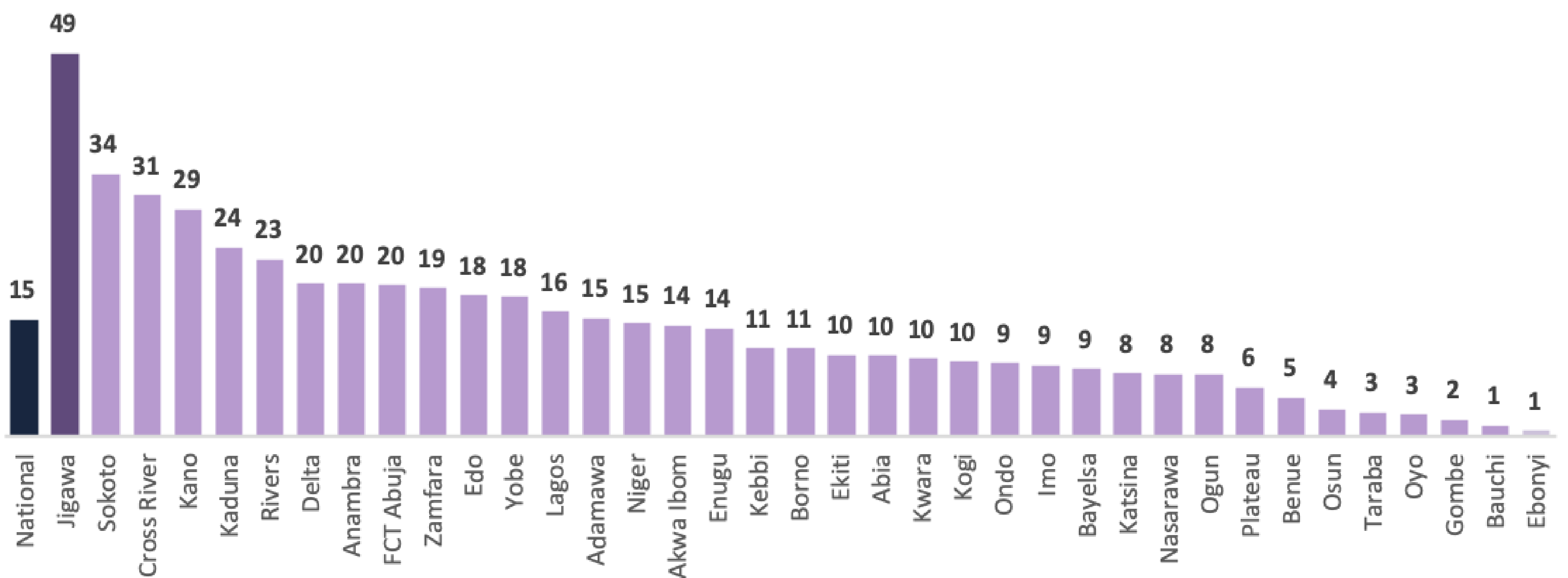
# Access to Basic Hygiene Services by State

Area Value Map for Access to Basic Hygiene Services in Nigeria

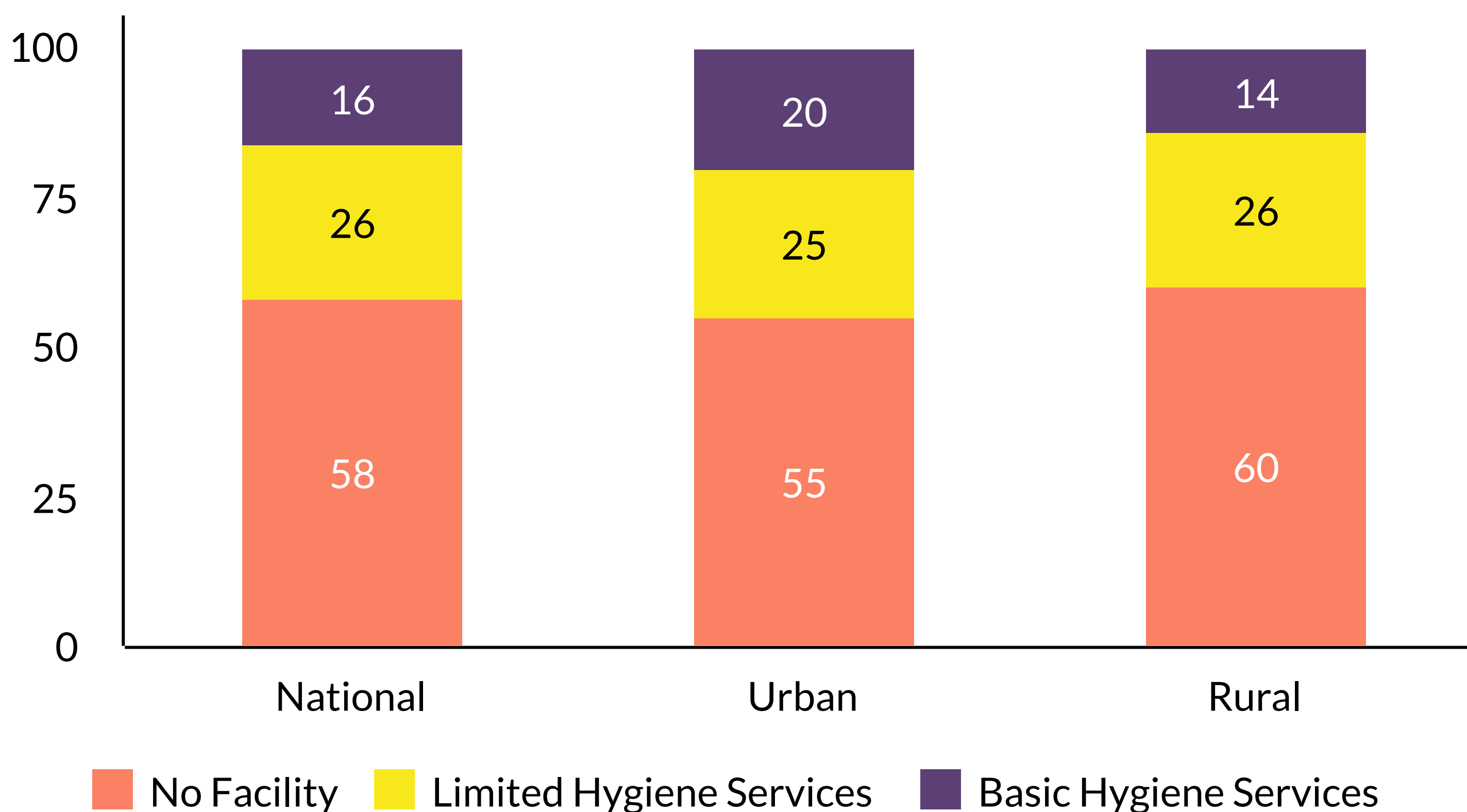


Almost half of Jigawa population has access to basic hygiene services compared to only 1% of citizens in Ebonyi state.

Access to Basic Hygiene Services by State



## Hygiene Services Ladder



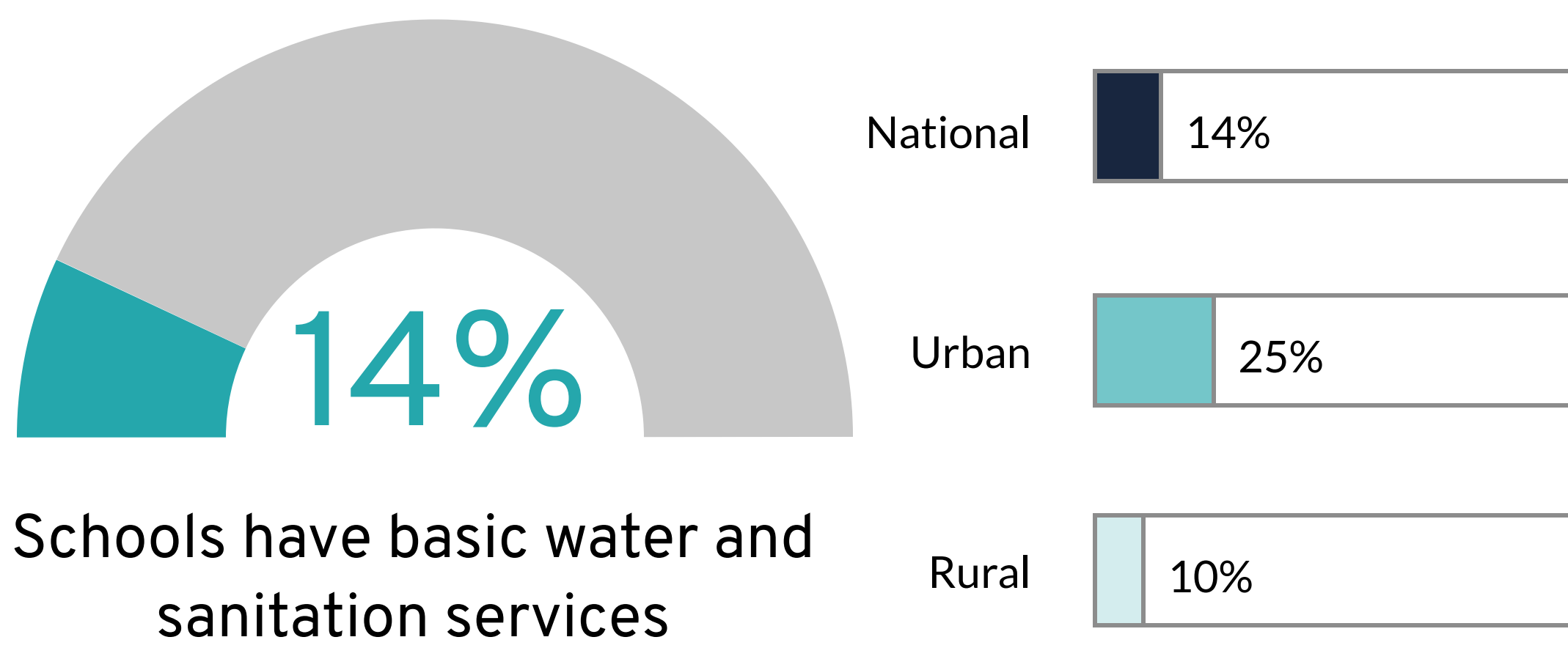
Based on WHO/UNICEF JMP definitions,

- **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

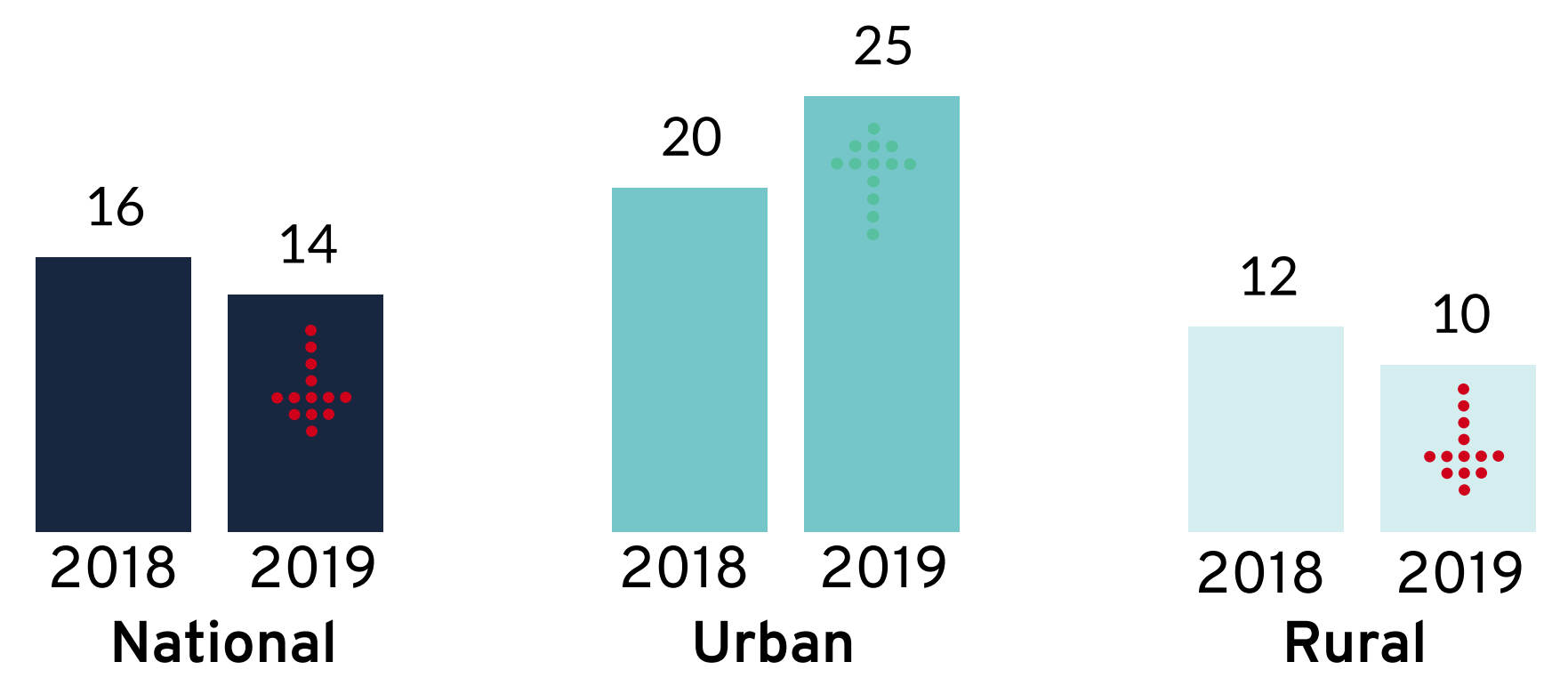




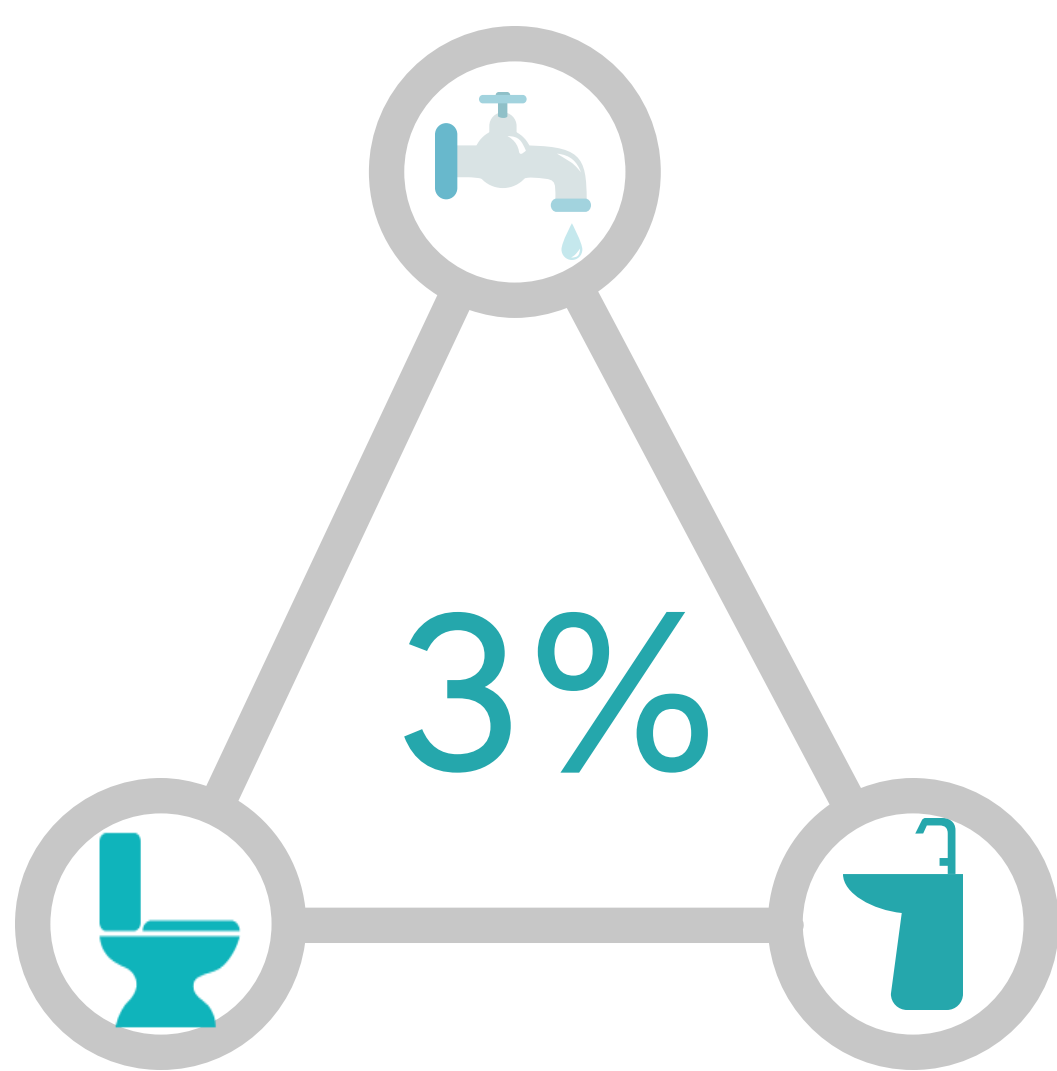
Only 14 per cent of schools have basic water supply and sanitation services.



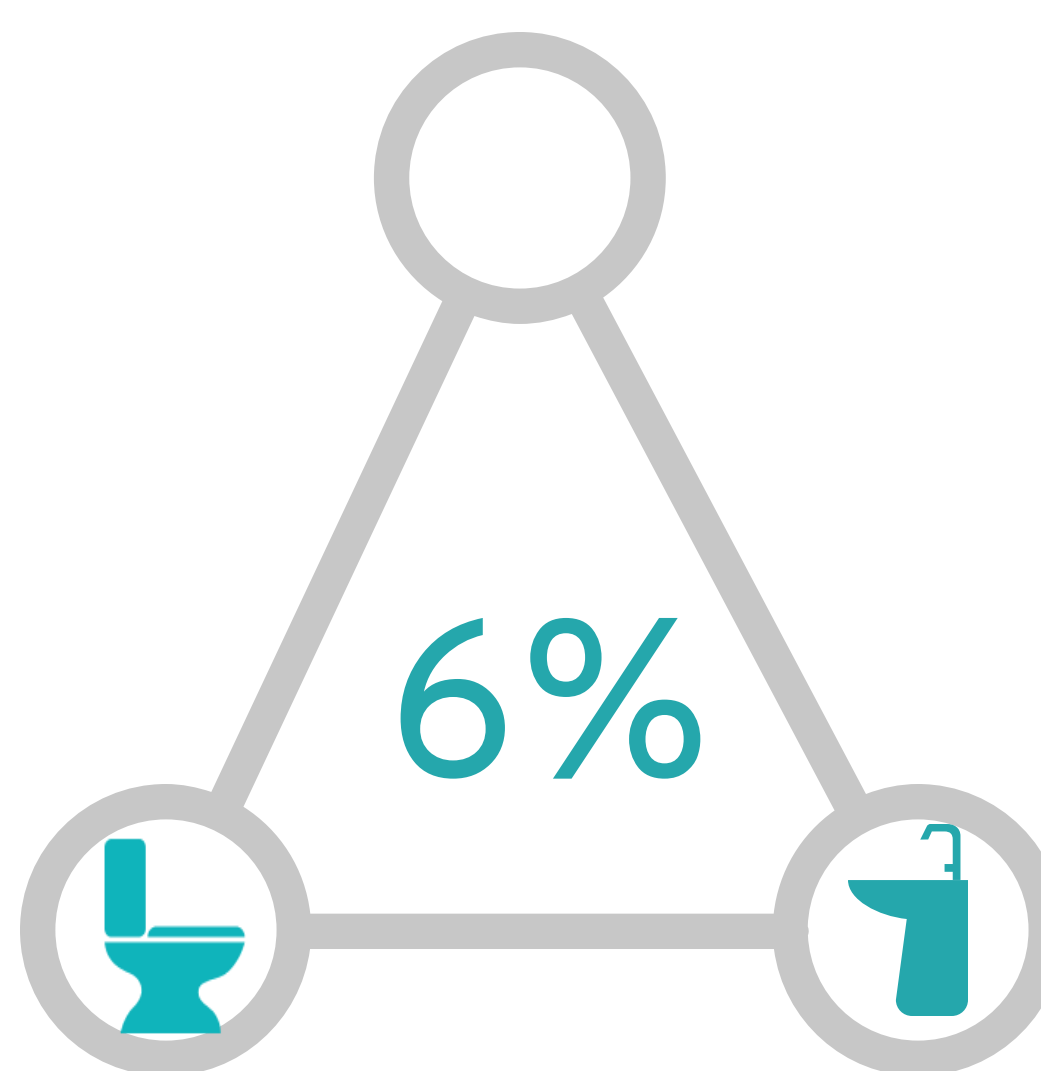
## Trends in access to basic water supply and sanitation services in schools



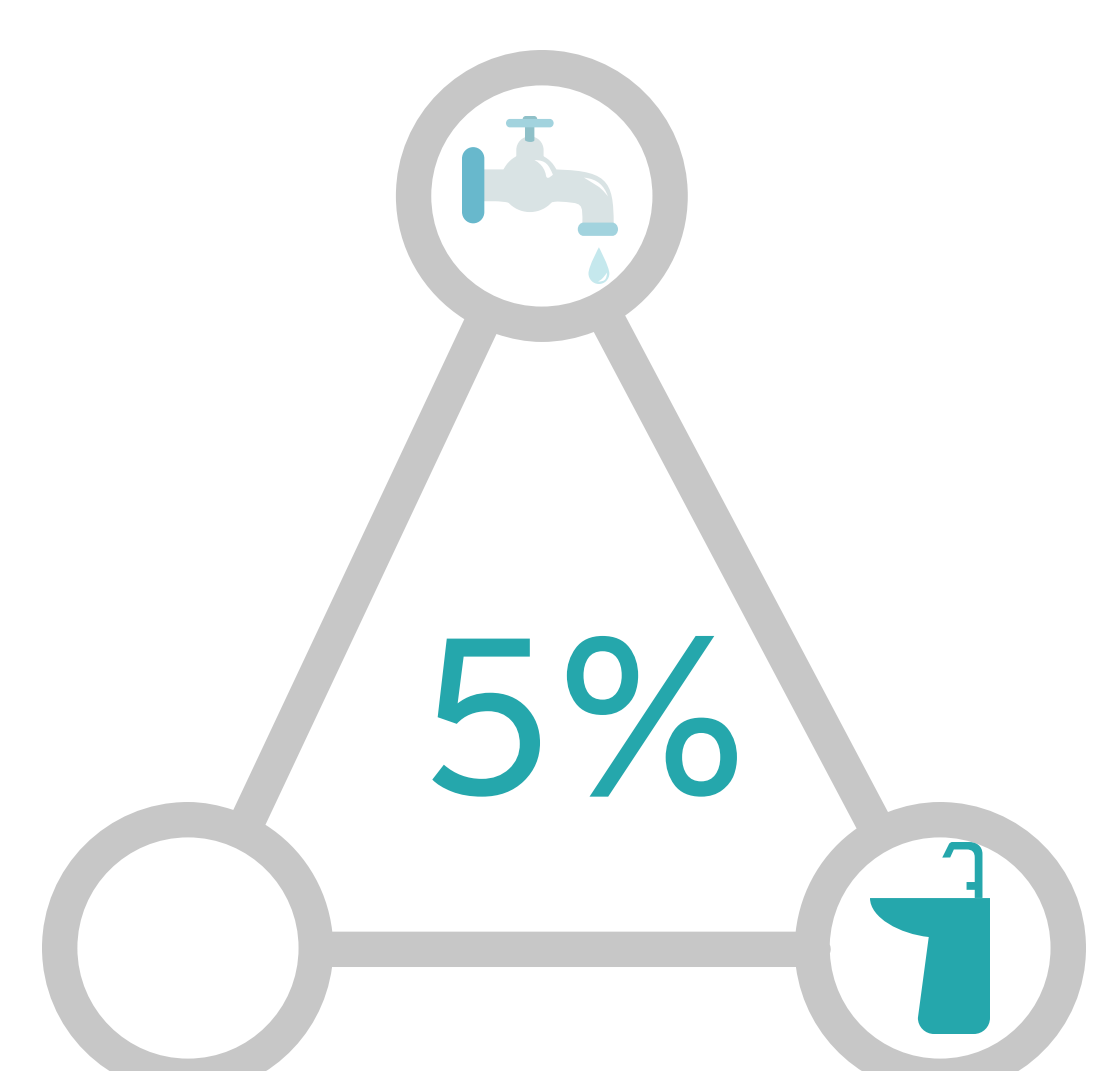
### Access to Basic Water, Sanitation and Hygiene services



### Access to Basic Sanitation and Hygiene services



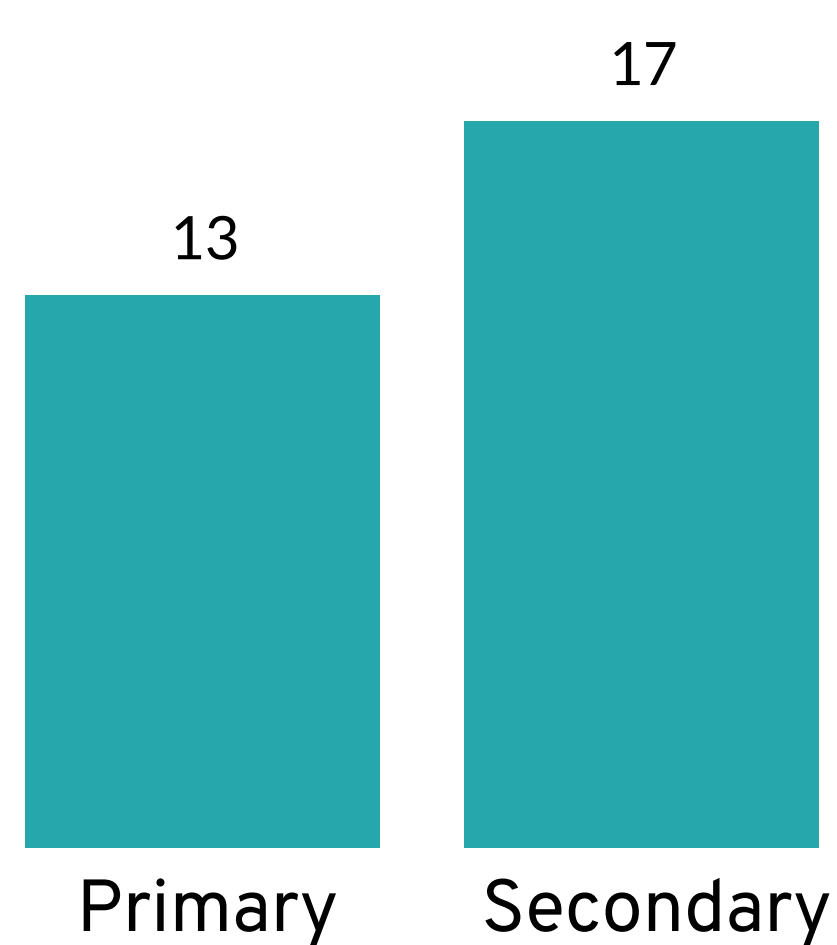
### Access to Basic Water and Hygiene services



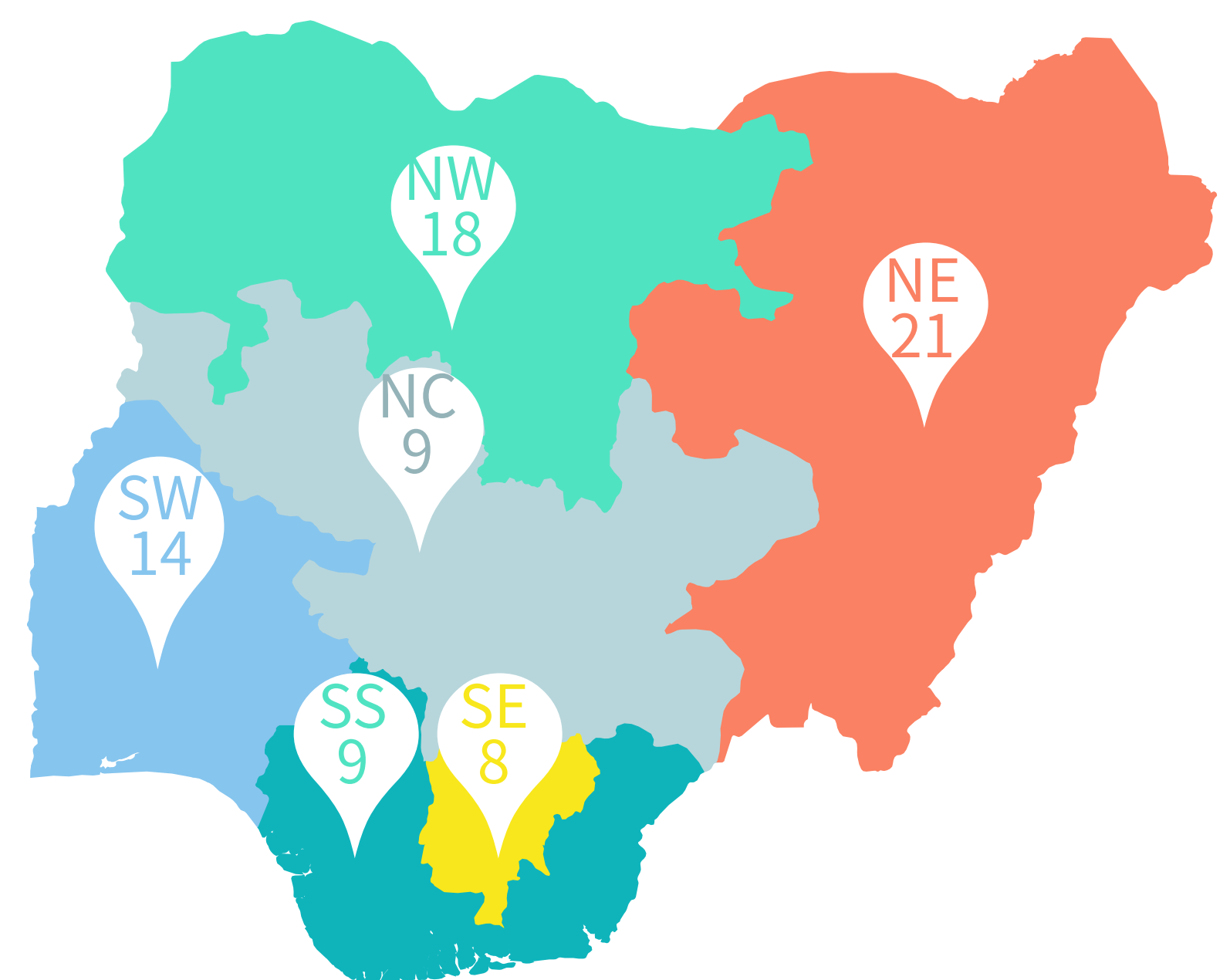
## Disparities in Access to Water and Sanitation Services in Schools

Primary schools are more disadvantaged in access to basic water and sanitation services than secondary schools. Schools in the northwest and northeast are more likely to have access to basic water and sanitation services.

### Access to Basic Water and Sanitation Services in Schools by Type



### Access to Basic Water and Sanitation services in Schools by Geopolitical Zones



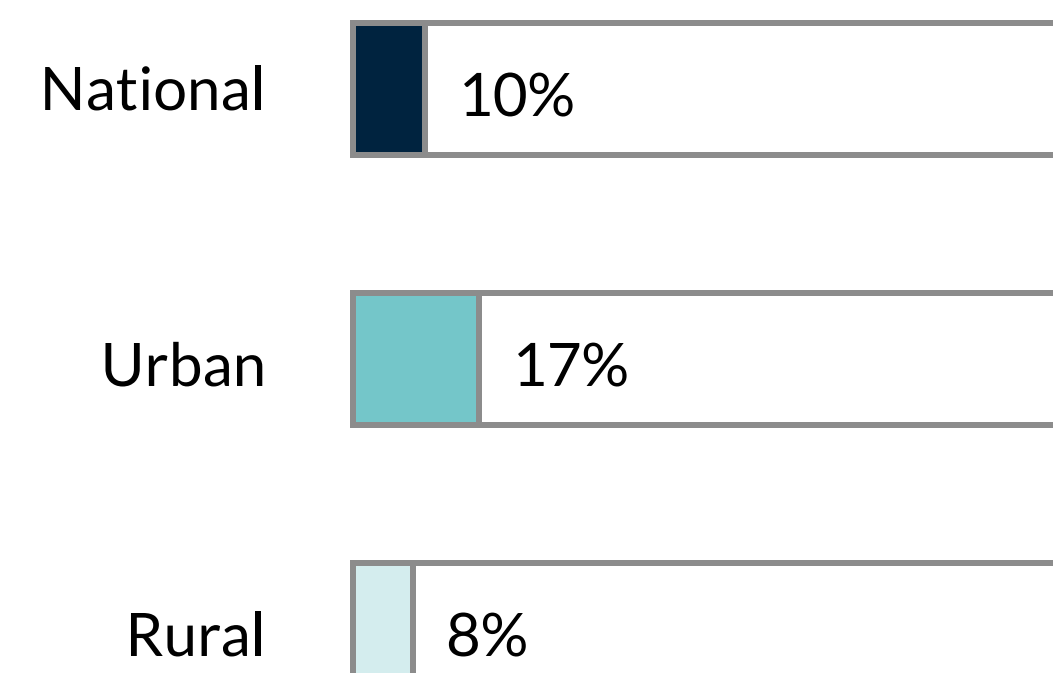
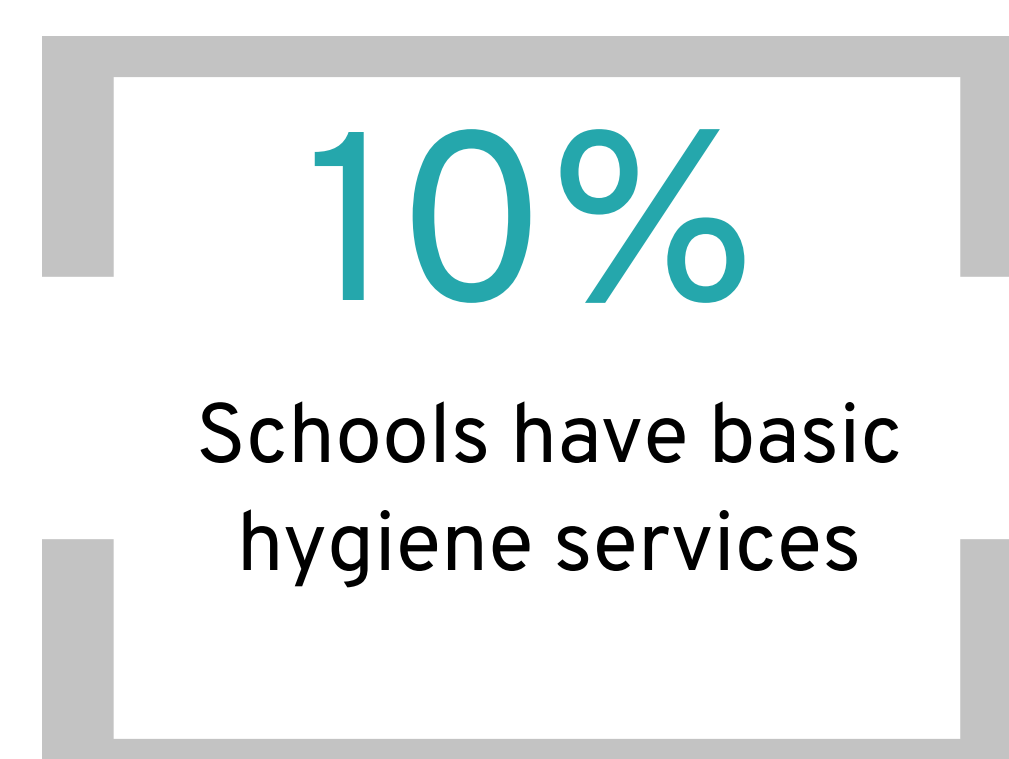
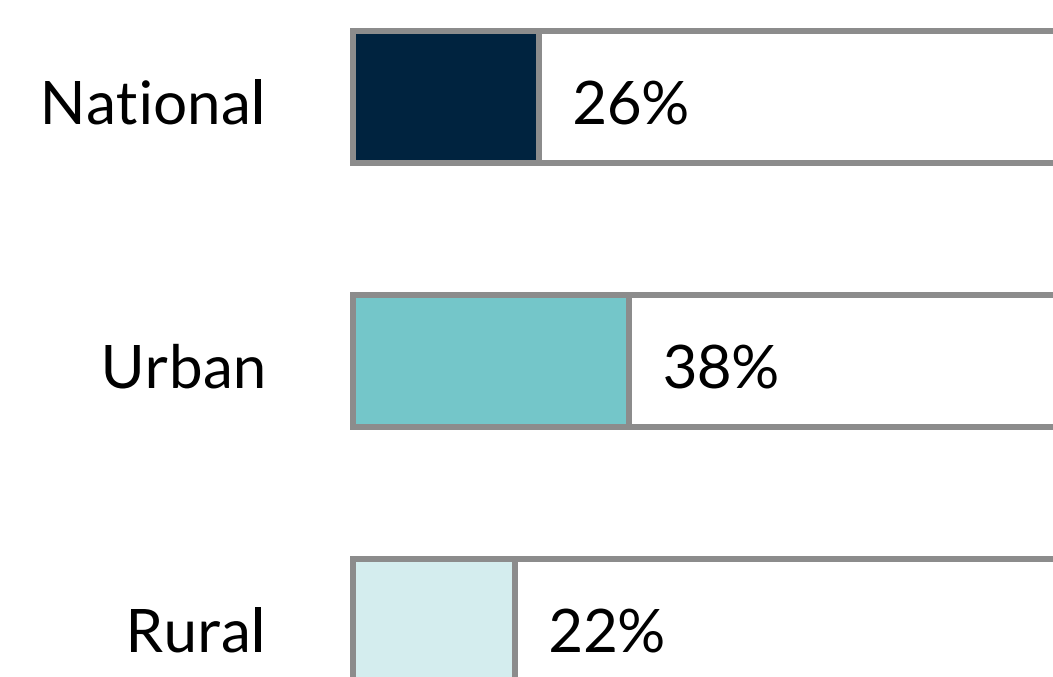
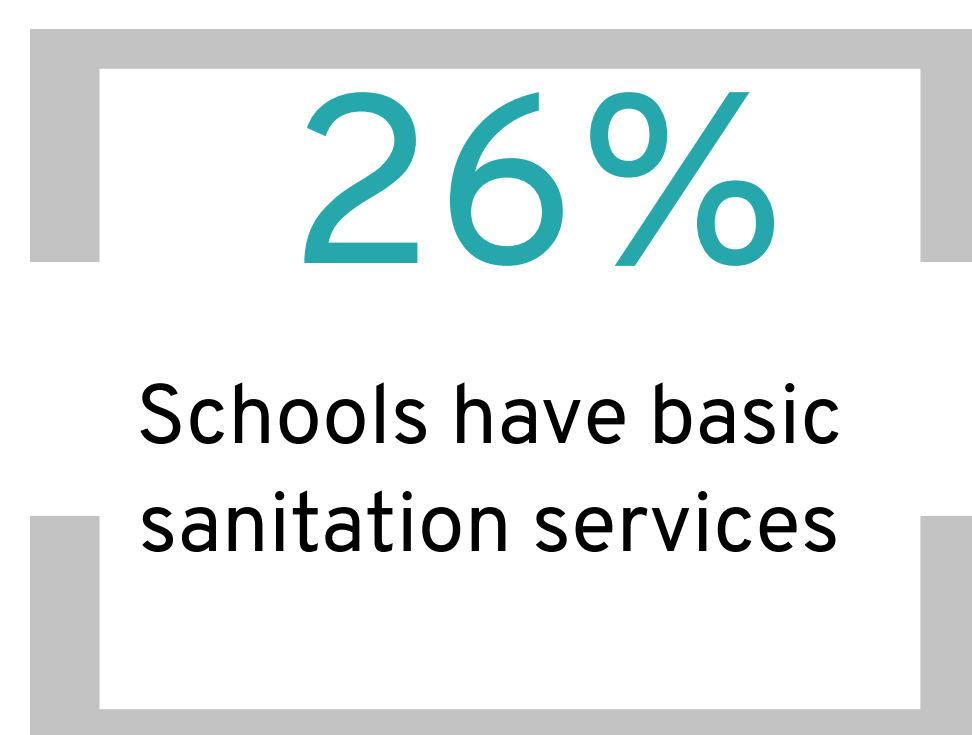
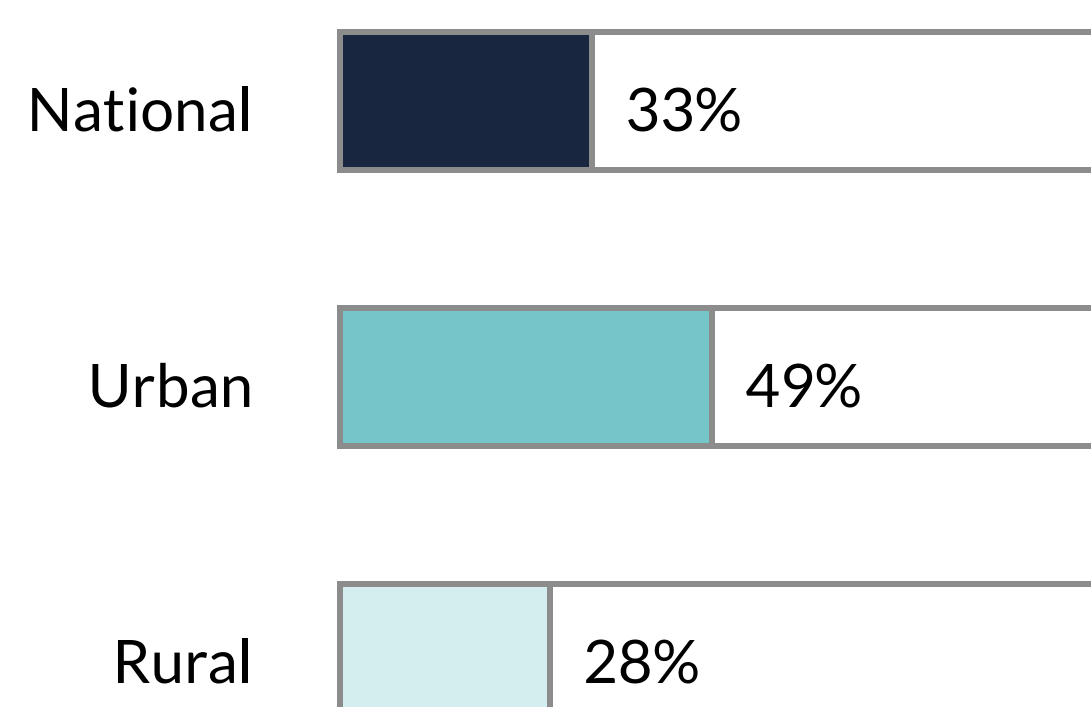
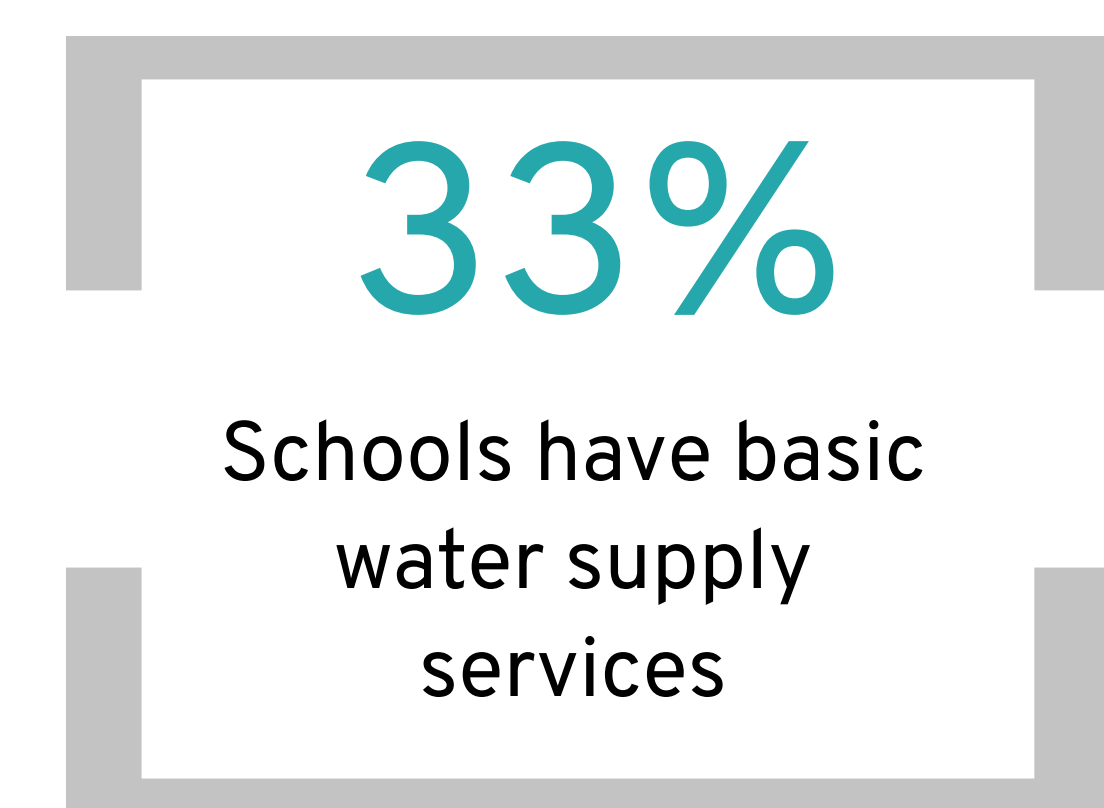
1.2%

Schools have basic gender-sensitive sanitation and hygiene service. 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 mensural hygiene management



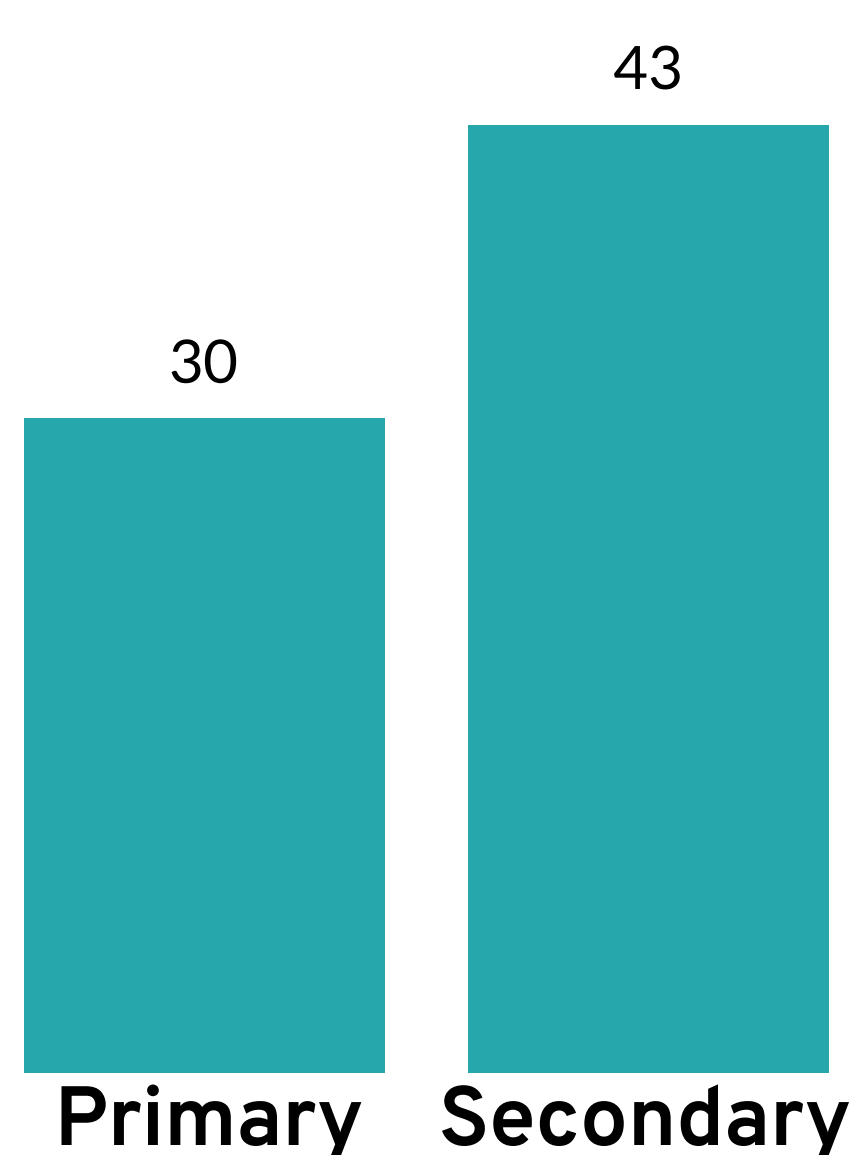
## Access to Water Supply, Sanitation and Hygiene Services in Schools

Only a third of schools have basic water supply services, slightly more than a quarter have access to basic sanitation services and 1 in 10 schools have access to basic hygiene services. Schools in rural areas are more disadvantaged in access to WASH services than their counterparts in urban areas.

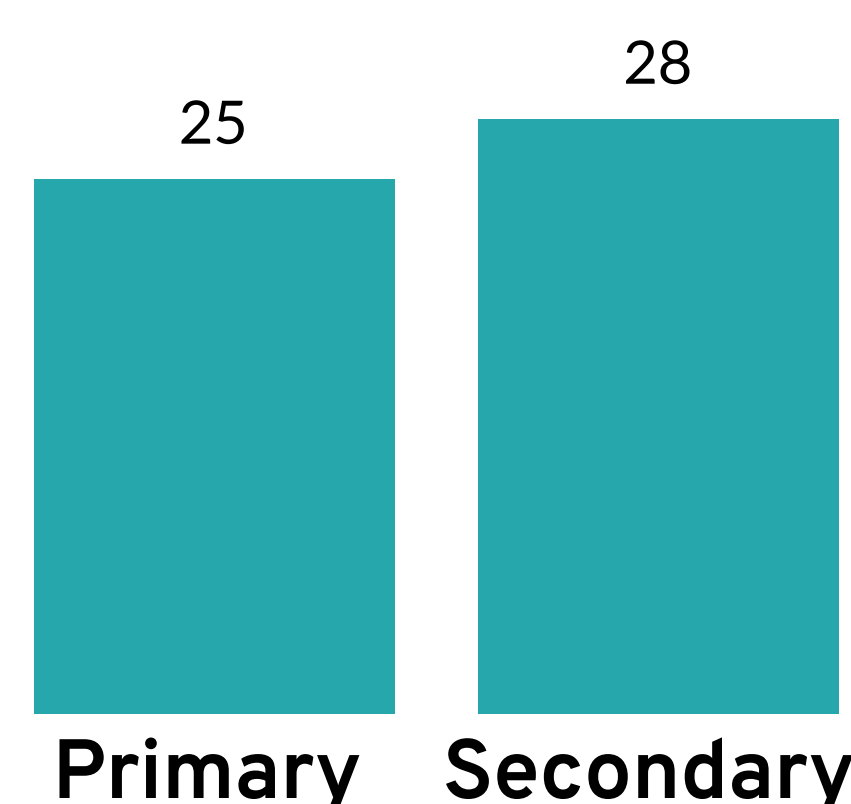


## Disparities in Access to Water, Sanitation and Hygiene Services in Schools

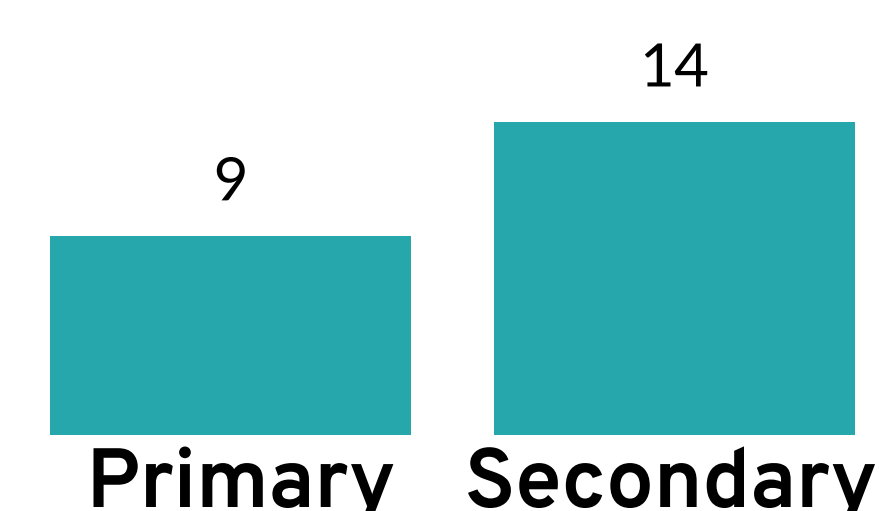
Access to Basic Water Supply Services in Schools



Access to Basic Sanitation Services in Schools by Type

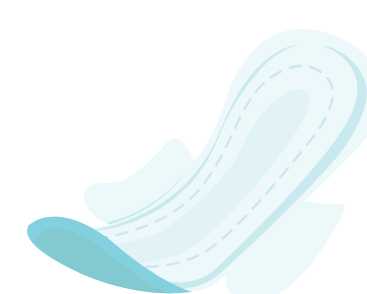


Access to Basic Hygiene Services in Schools by Type



**19%**

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



**3%**

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



**83%**

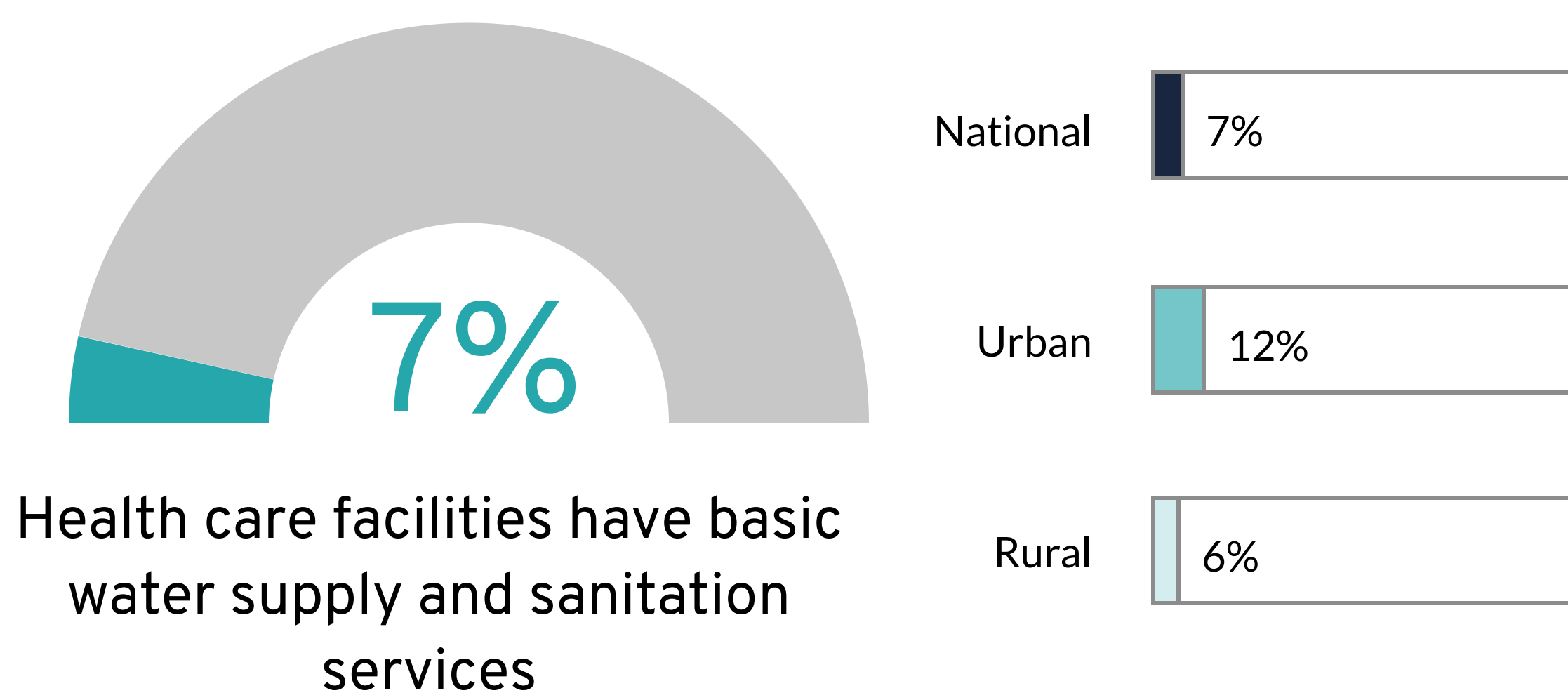
schools dispose of their solid waste properly



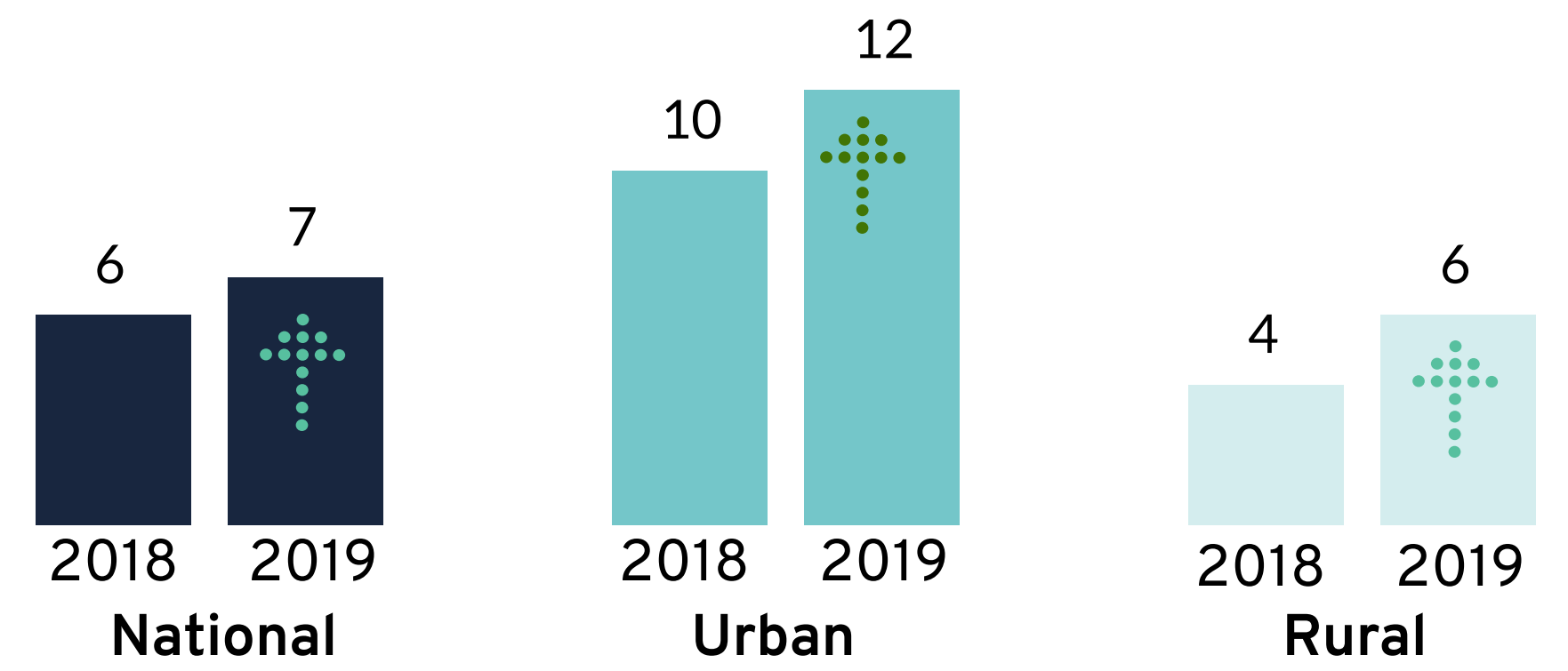
# WASH in Health Facilities



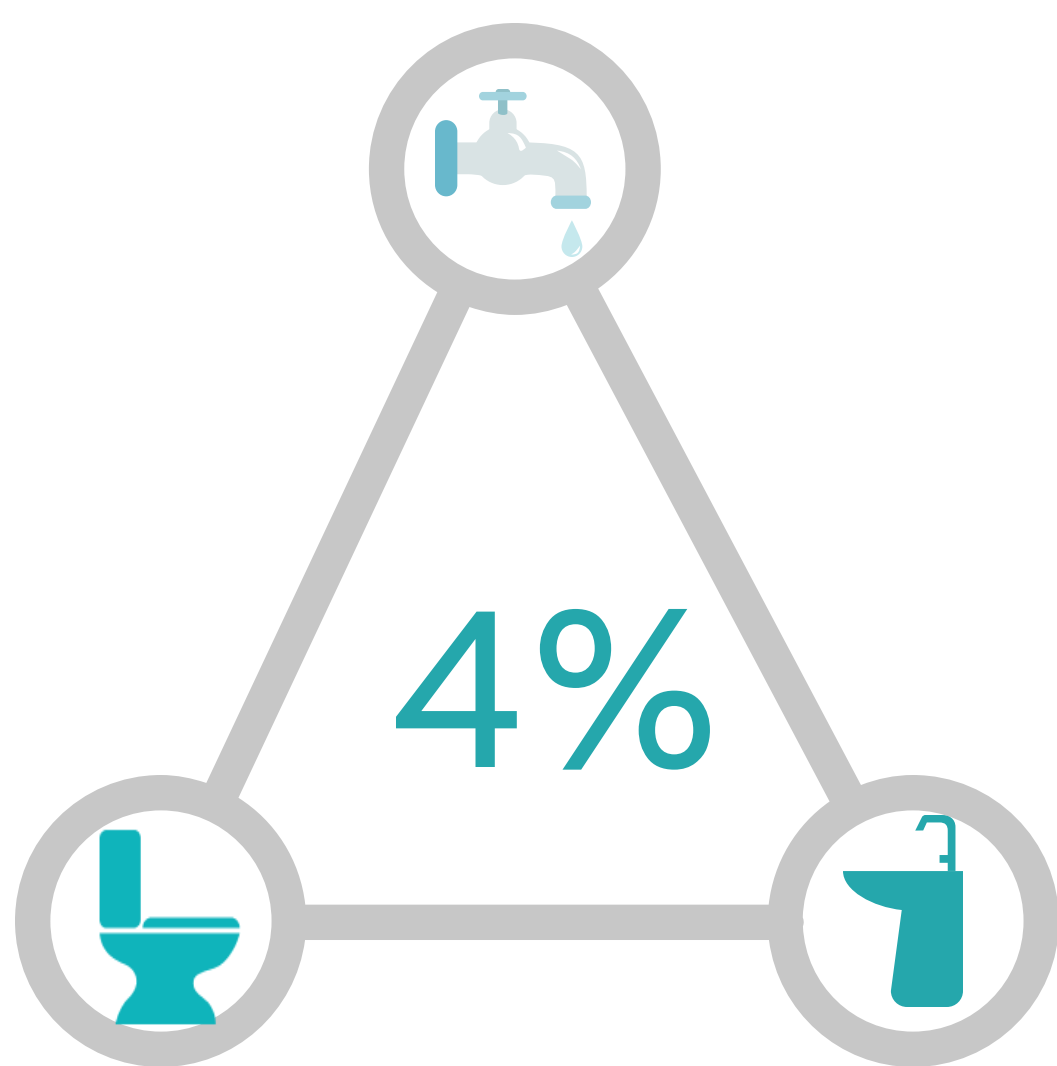
Only 7 per cent of health facilities have basic water supply and sanitation services.



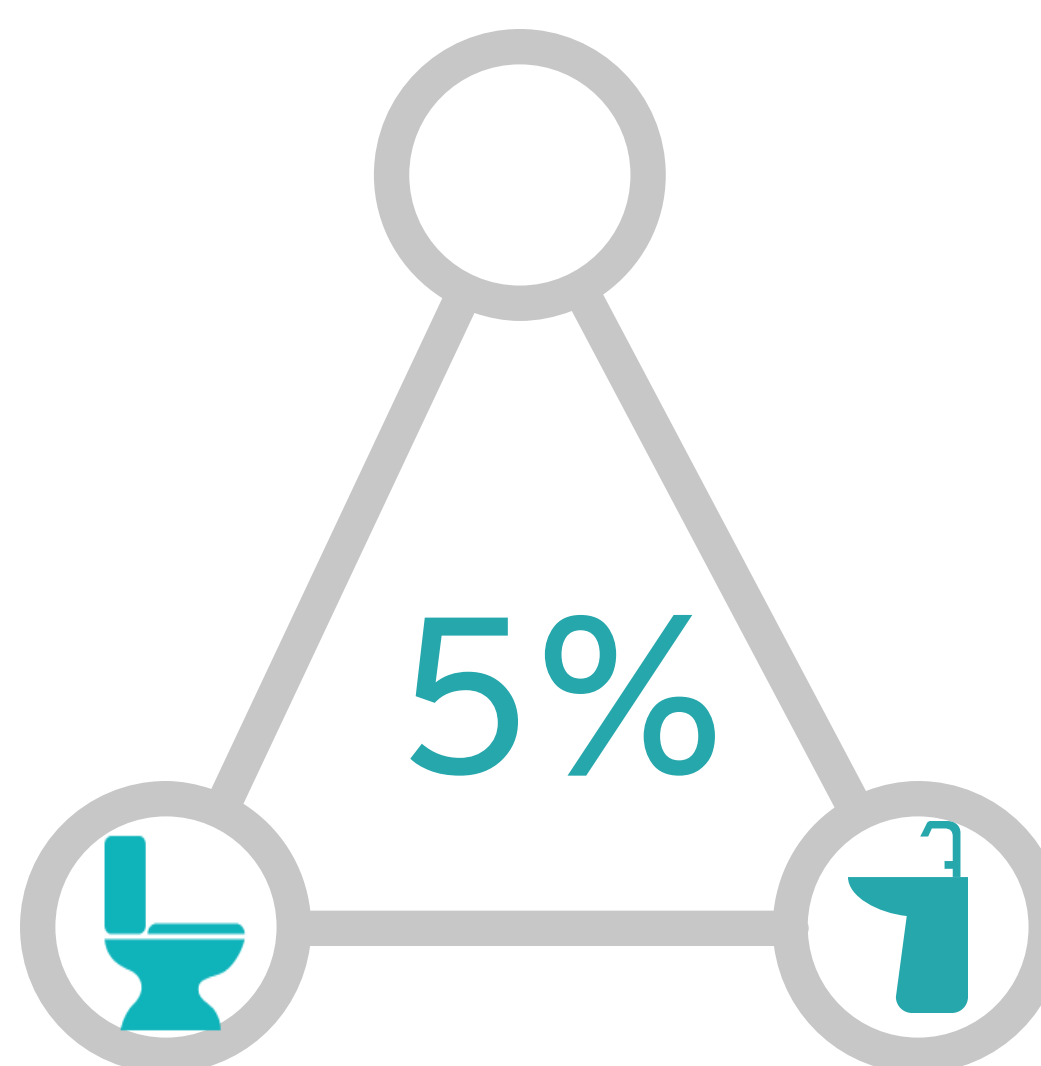
## Trends in access to basic water supply and sanitation services in health care facilities



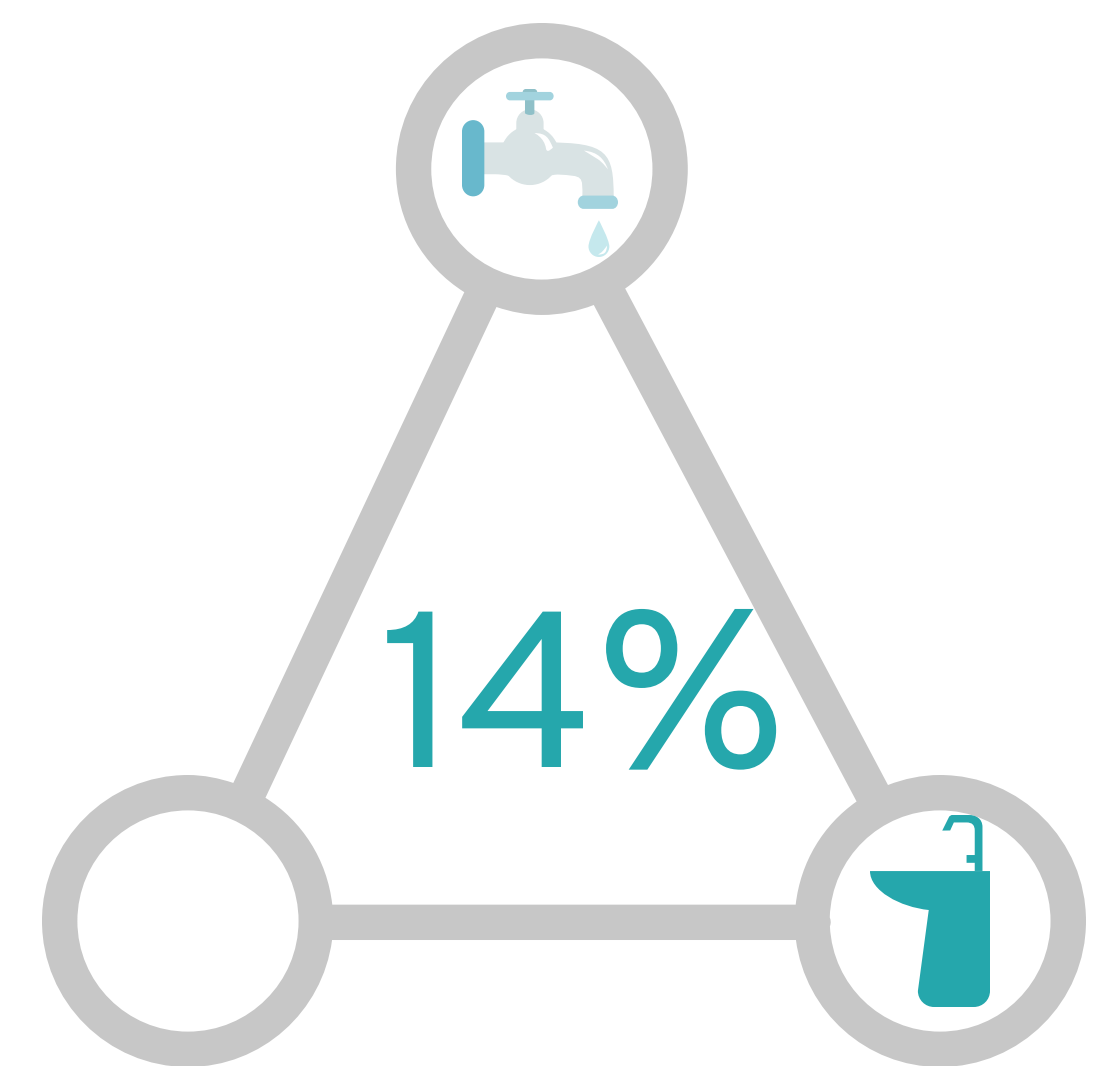
### Access to Basic Water, Sanitation and Hygiene services



### Access to Basic Sanitation and Hygiene services



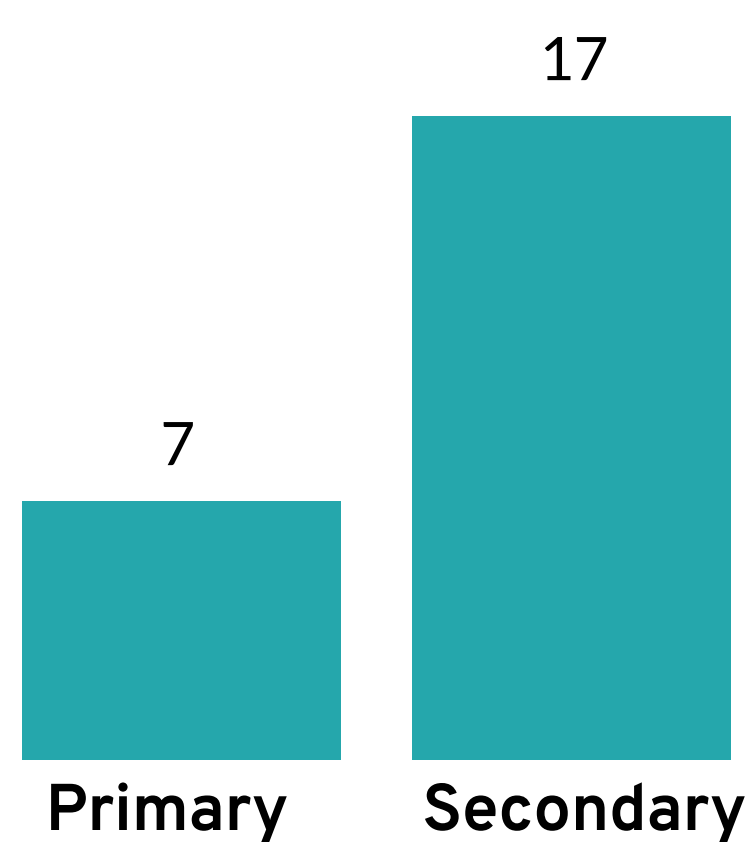
### Access to Basic Water and Hygiene services



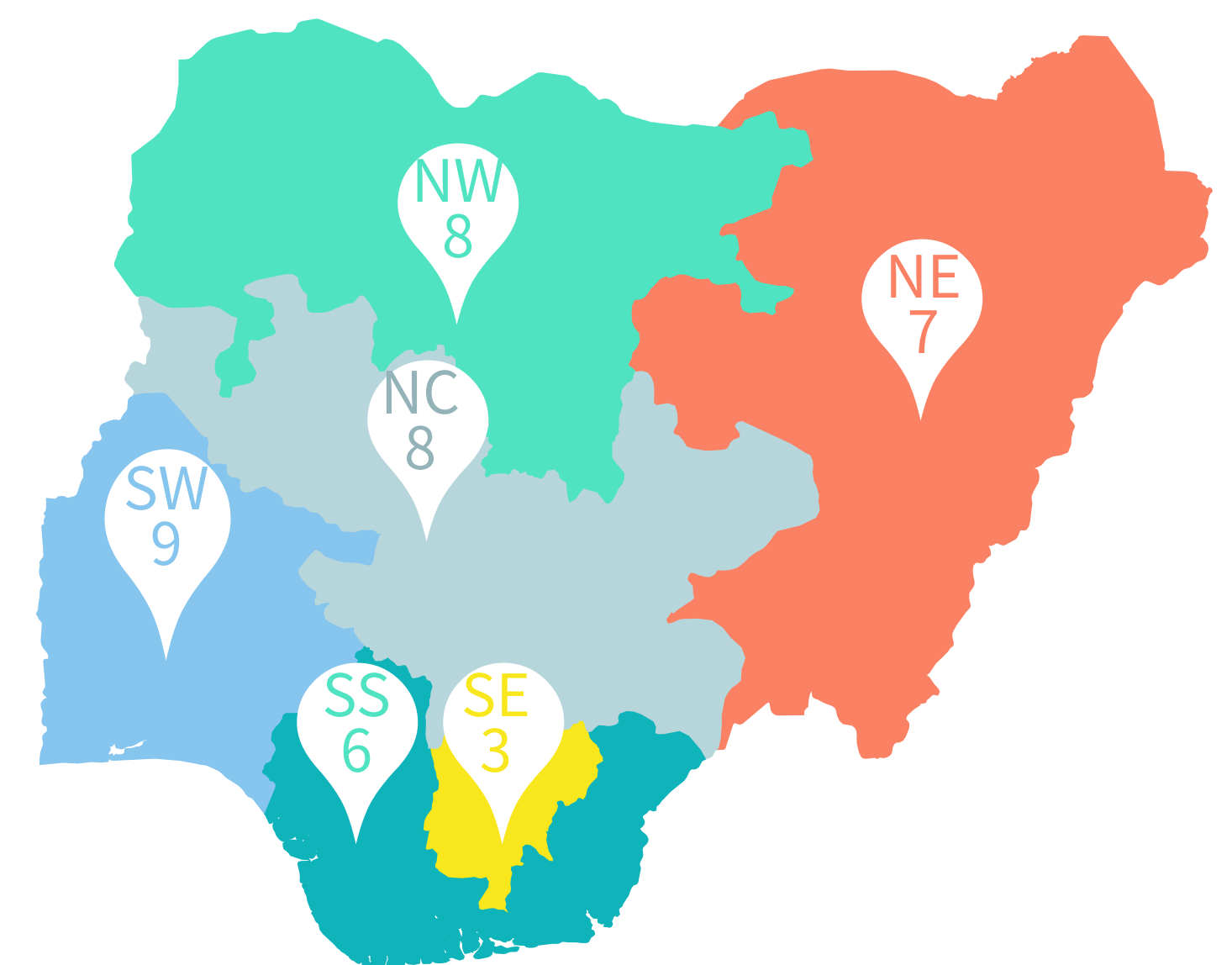
## Disparities in Access to Water and Sanitation Services in Health Care Facilities

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



## Diarrhea Prevalence in Nigeria

**1 in 10**

Households had at least one member who suffered diarrhea in the past 6 weeks preceding the survey

Hospital records showed 54% of all sick reports are diarrhea cases



**72%**

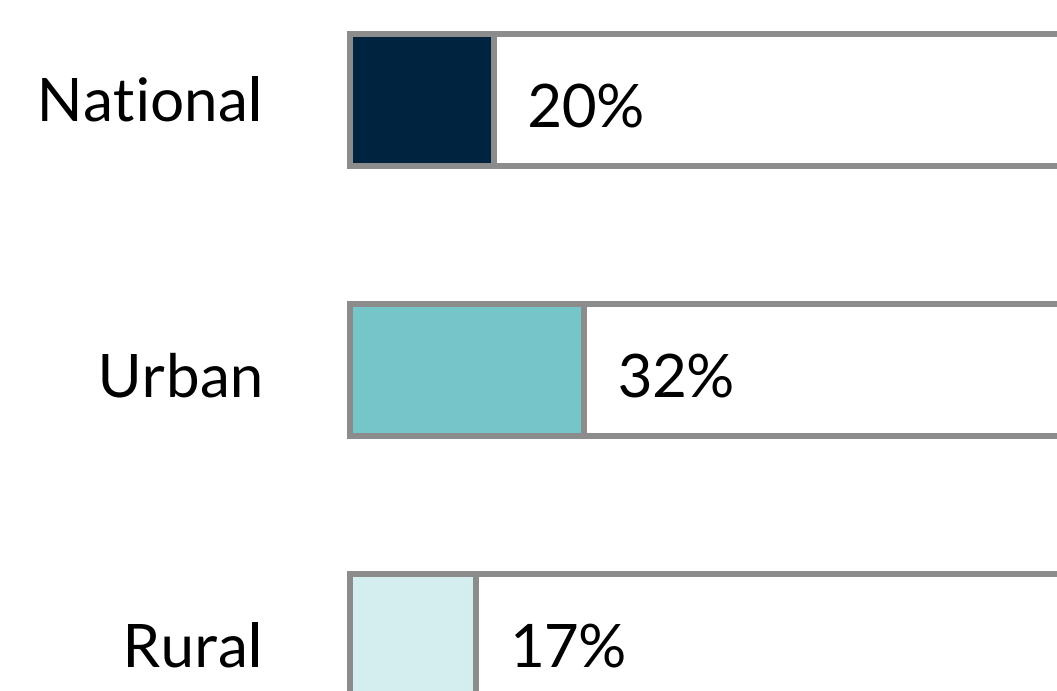
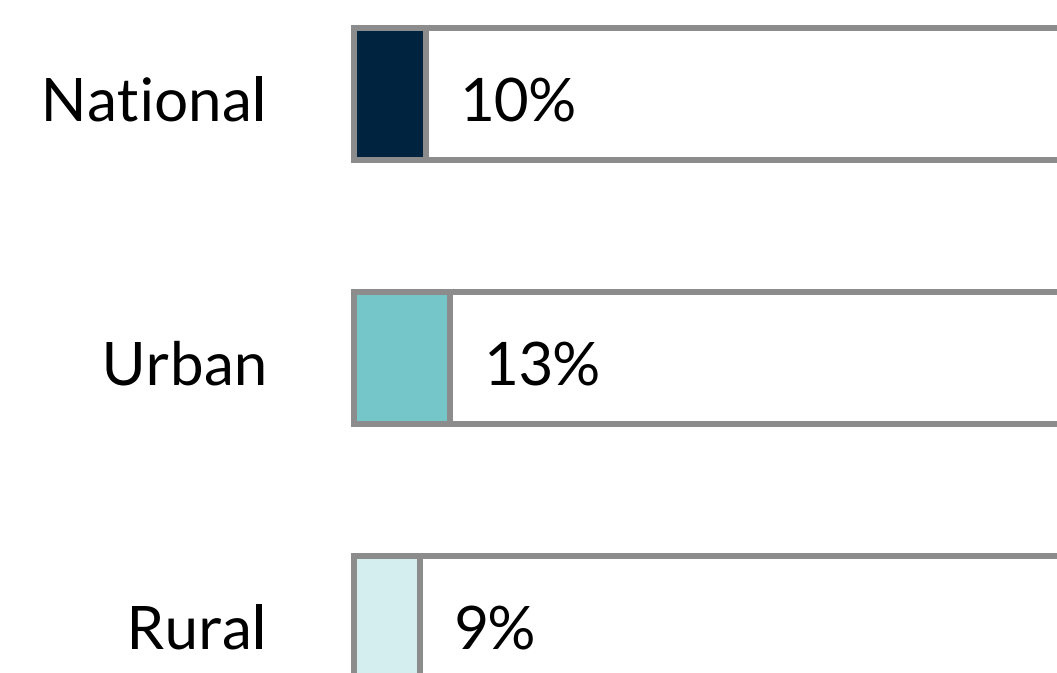
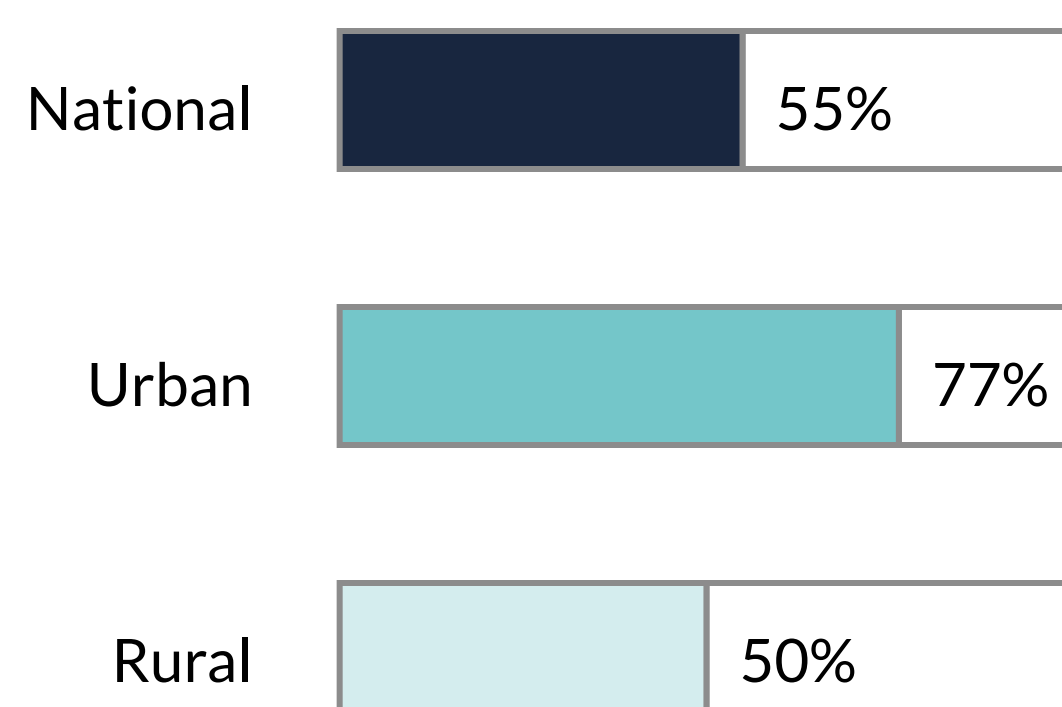


of household members who suffered diarrhea are children under five years old



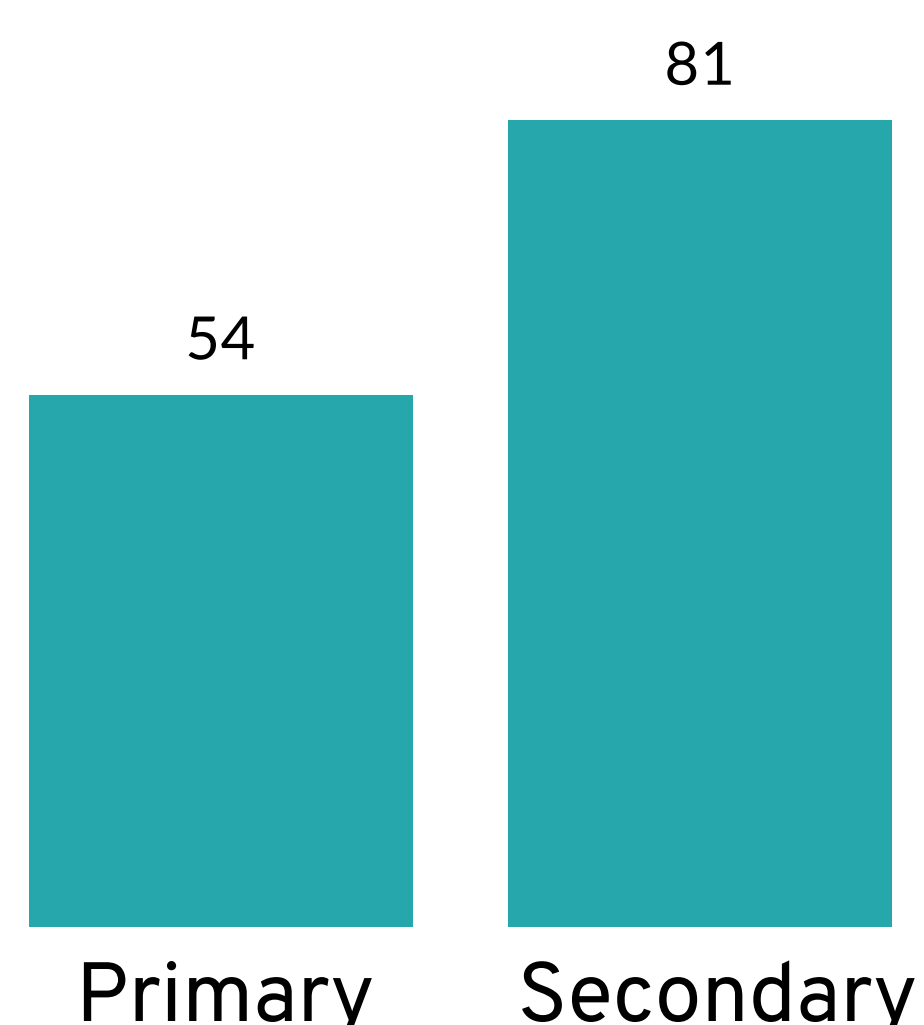
## Access to Water Supply, Sanitation and Hygiene Services in Health Facilities

Slightly more than half of health facilities in Nigeria have basic water supply services, 1 in 10 health facilities have access to basic sanitation services and 1 in 5 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.

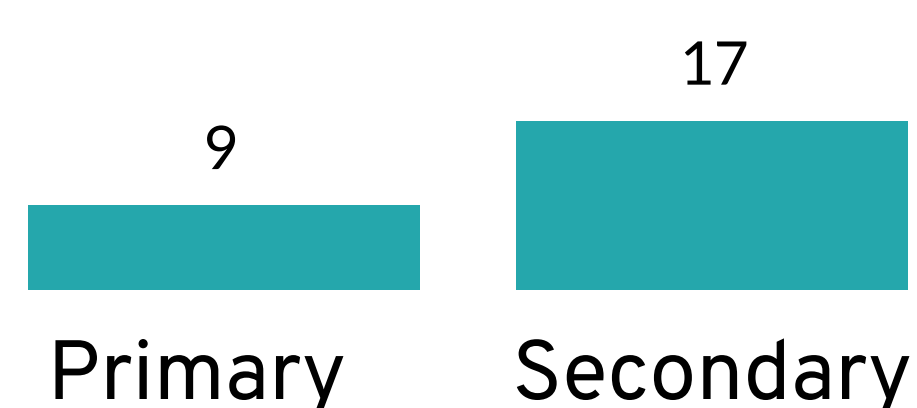


## Disparities in Access to Water and Sanitation Services in Health Care Facilities

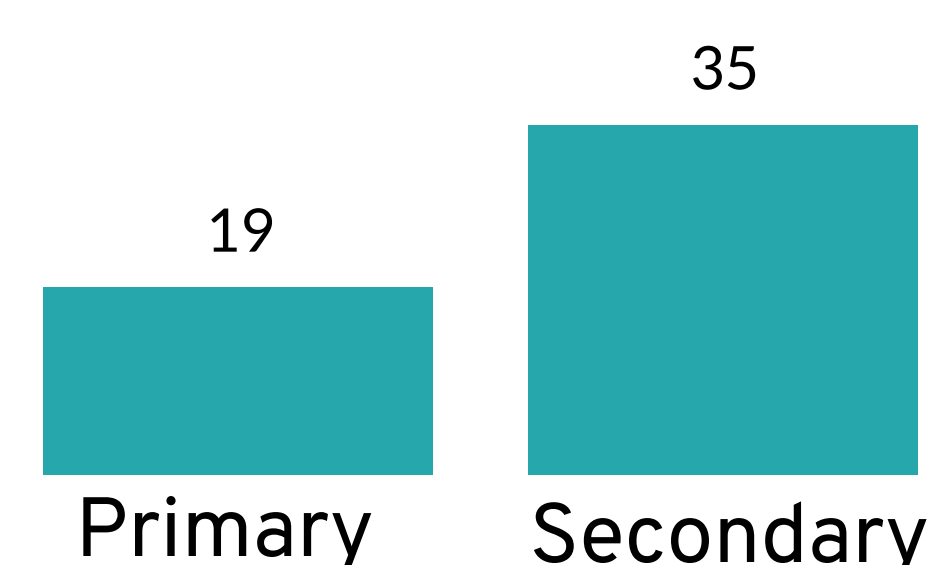
Access to Basic Water Supply Services in Health Facilities by Type



Access to Basic Sanitation Services in Health Facilities by Type



Access to Basic Hygiene Services in Health Facilities by Type



**34%**

Health facilities have basic water supply services that are accessible to persons living with disabilities



**21%**

Health facilities have basic sanitation services that are accessible to persons living with disabilities



**33%**

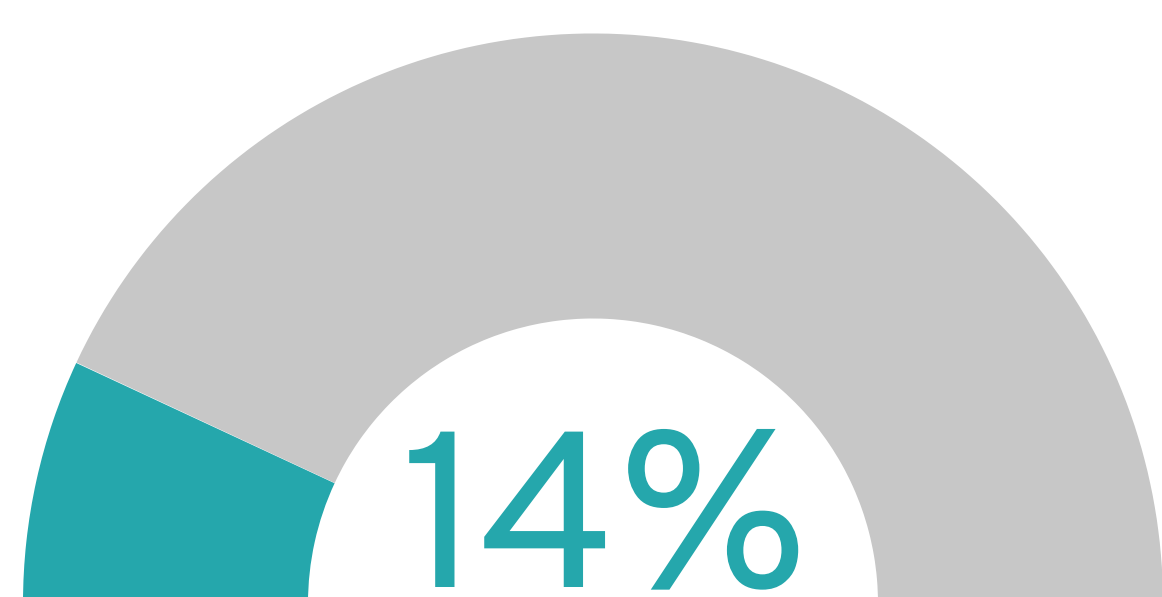
Health facilities have their garbage/waste separated into at least three labeled bins in the consultation areas and safely disposed



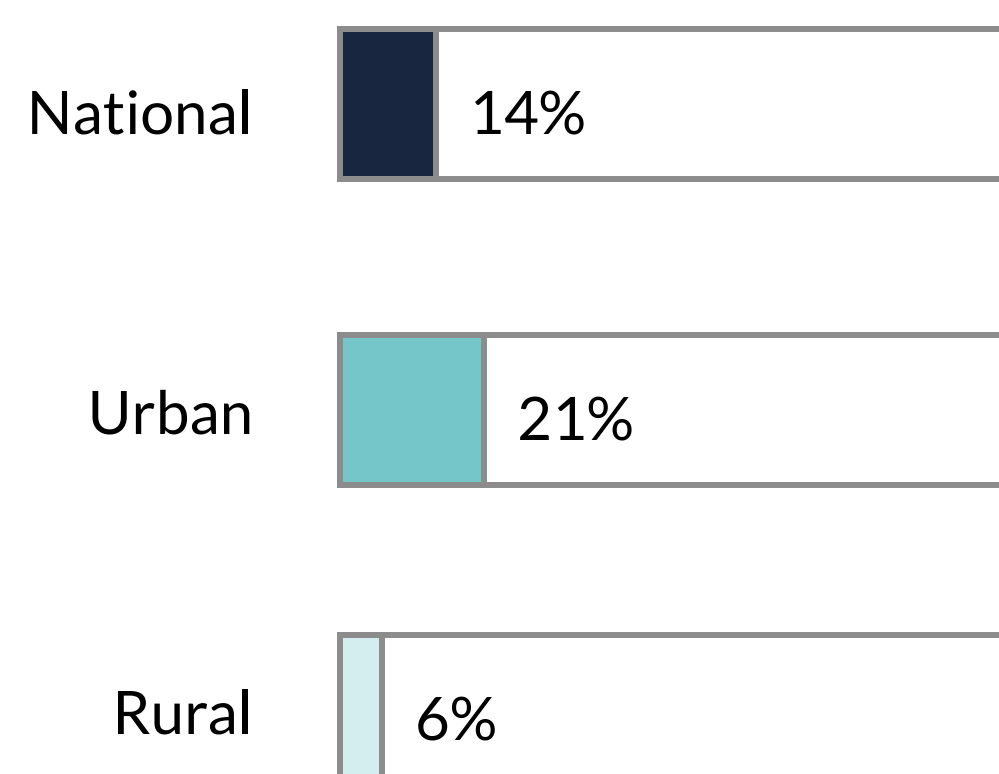
# WASH in Markets and Motor Parks



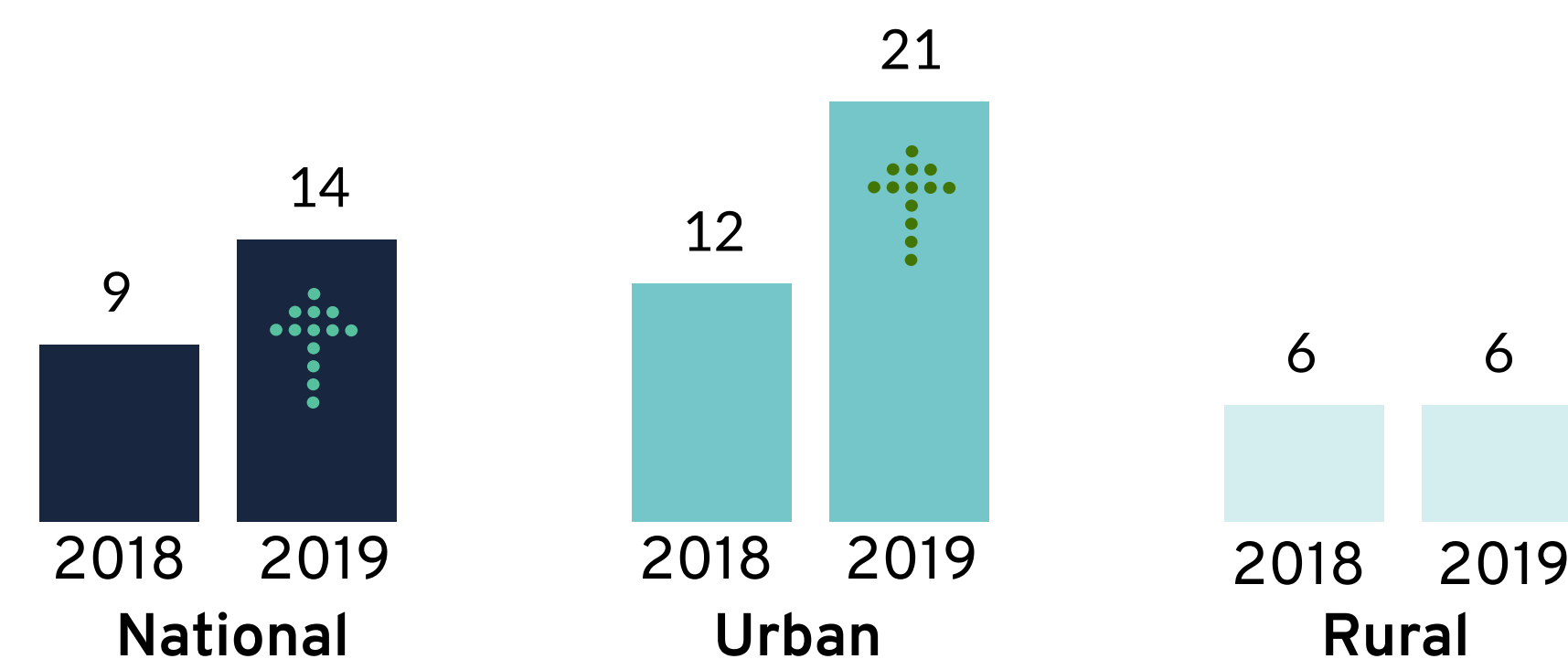
Only 14 per cent of markets and motor parks have basic water supply and sanitation services



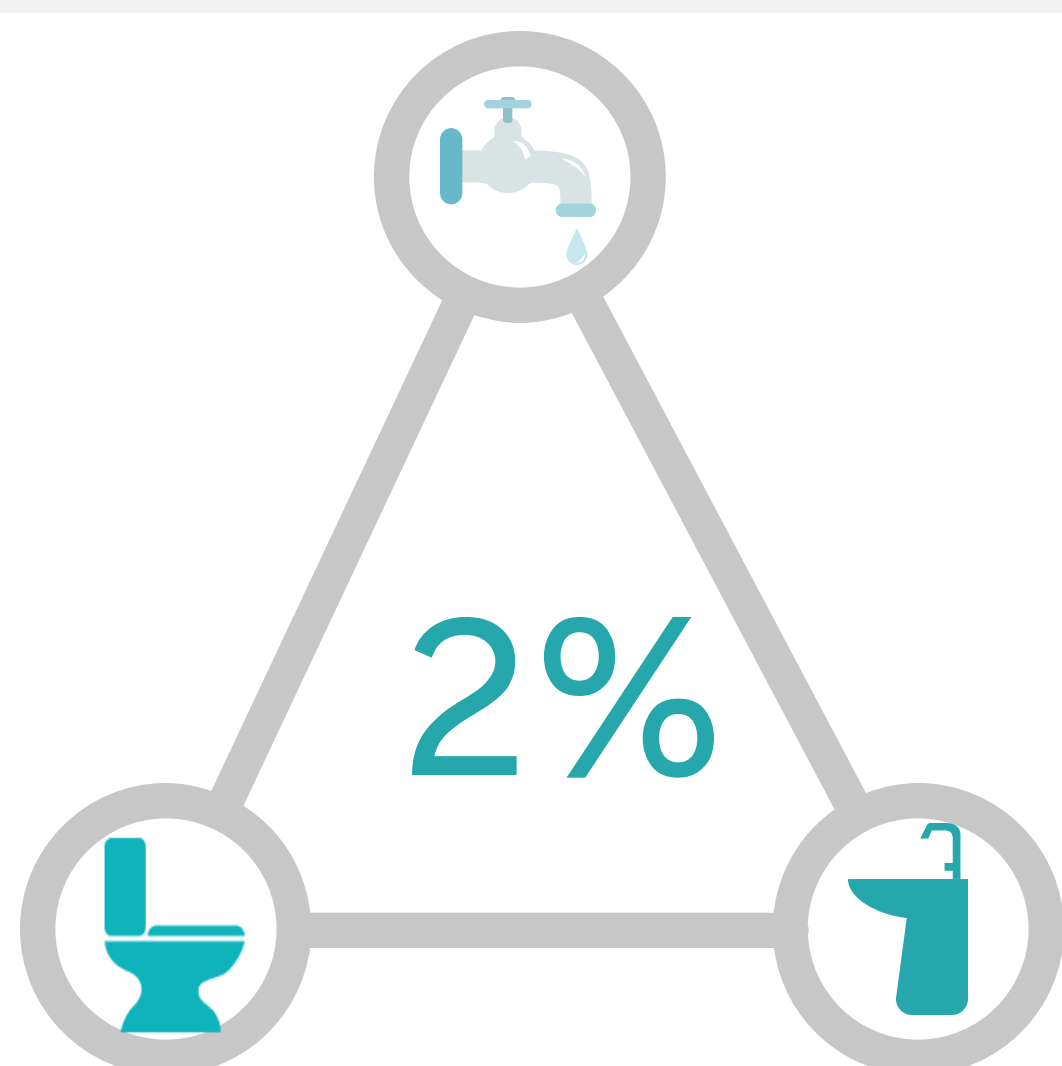
Markets/Motor Parks with basic Water and Sanitation services



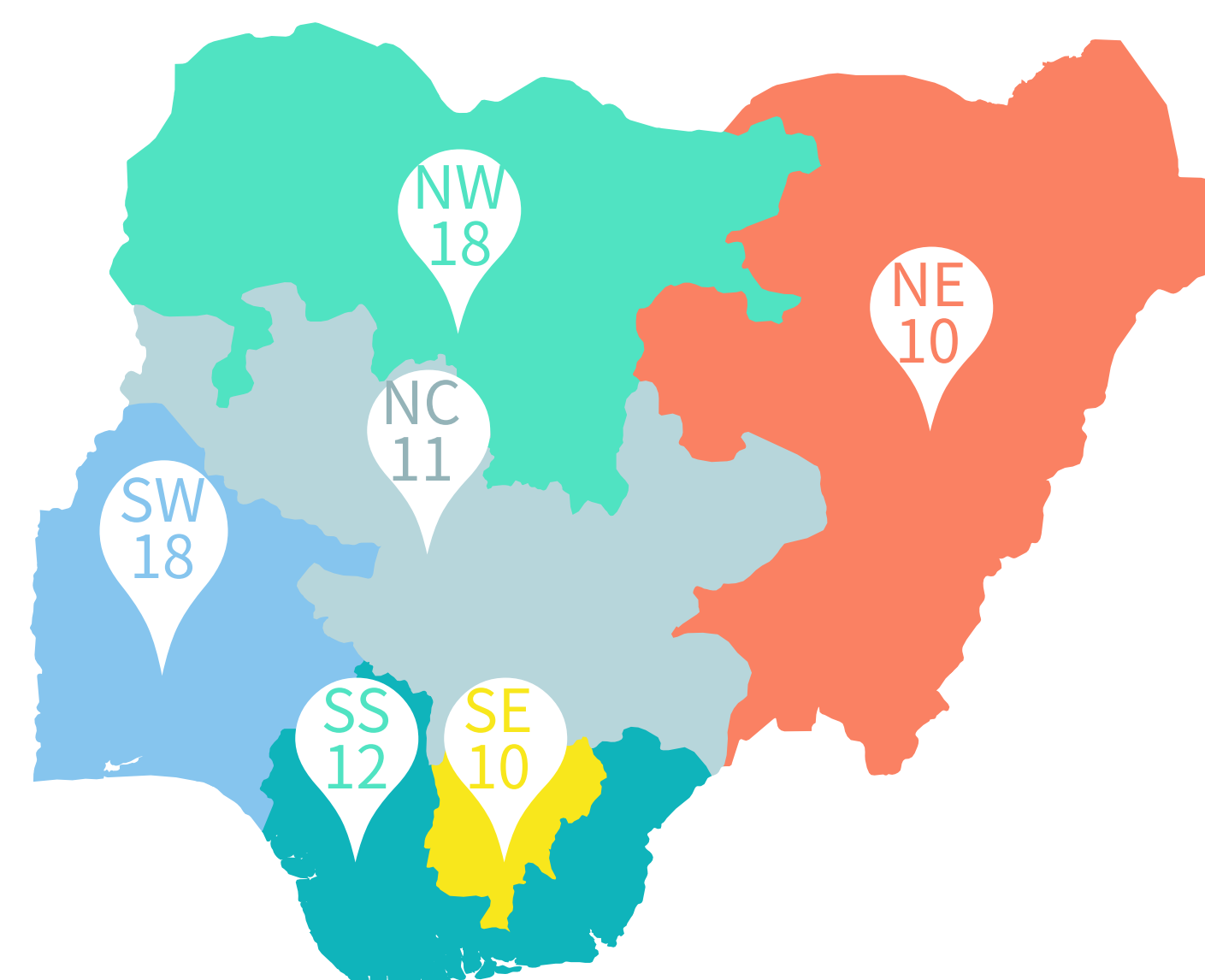
Trends in access to basic water supply and sanitation services in markets/motor parks



Only 2% of all markets and motor parks have access to combined basic water, sanitation and hygiene services

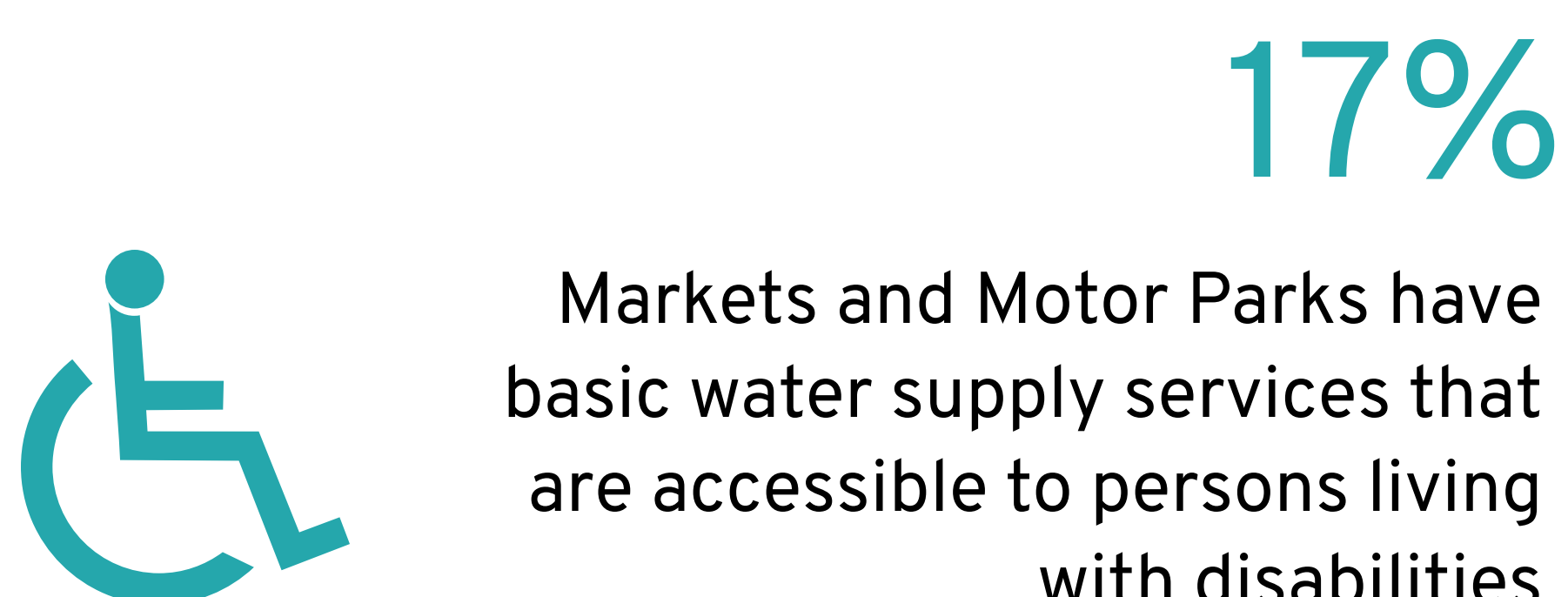
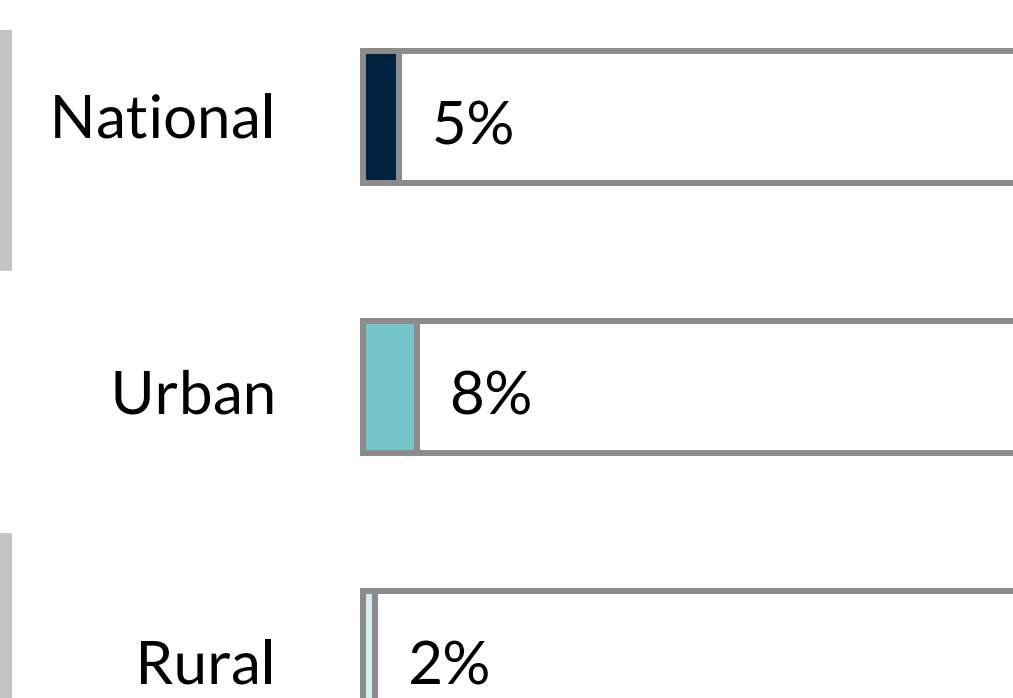
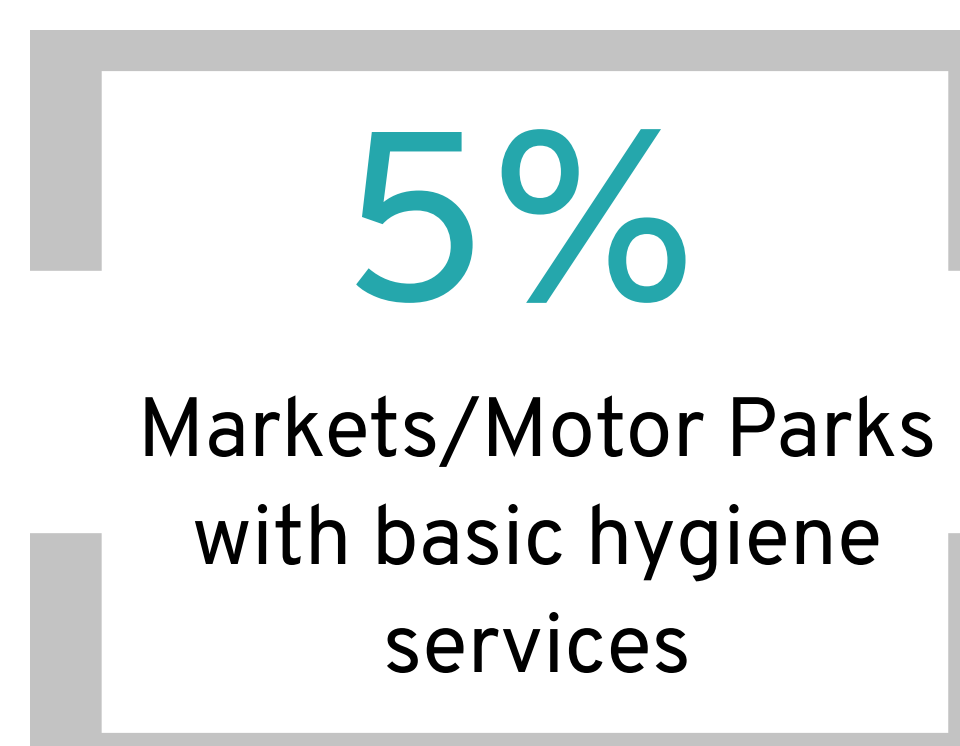
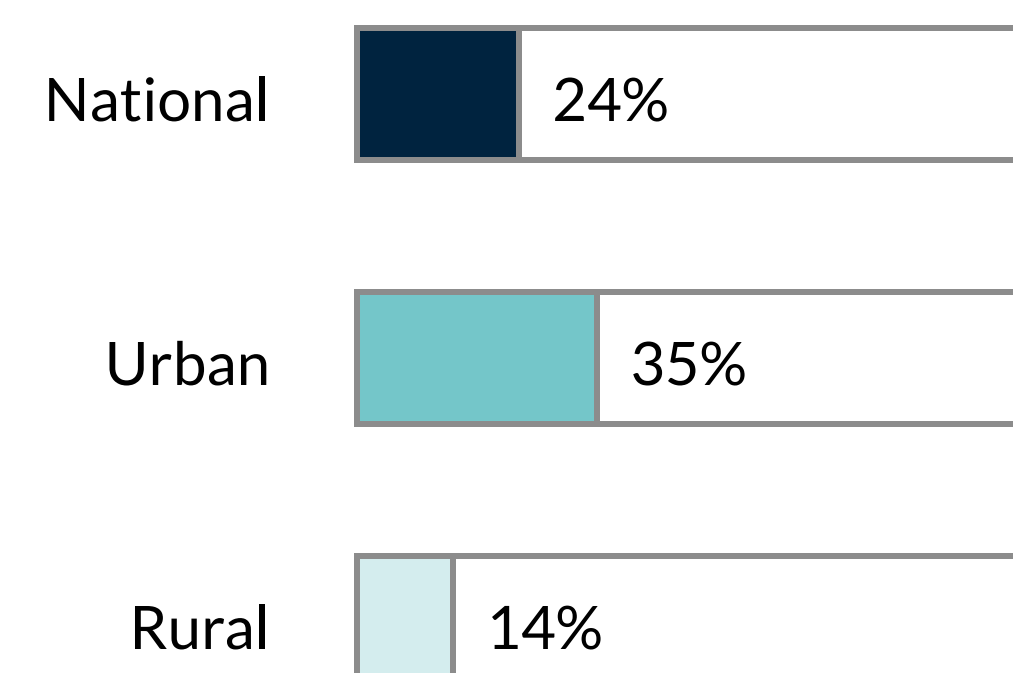
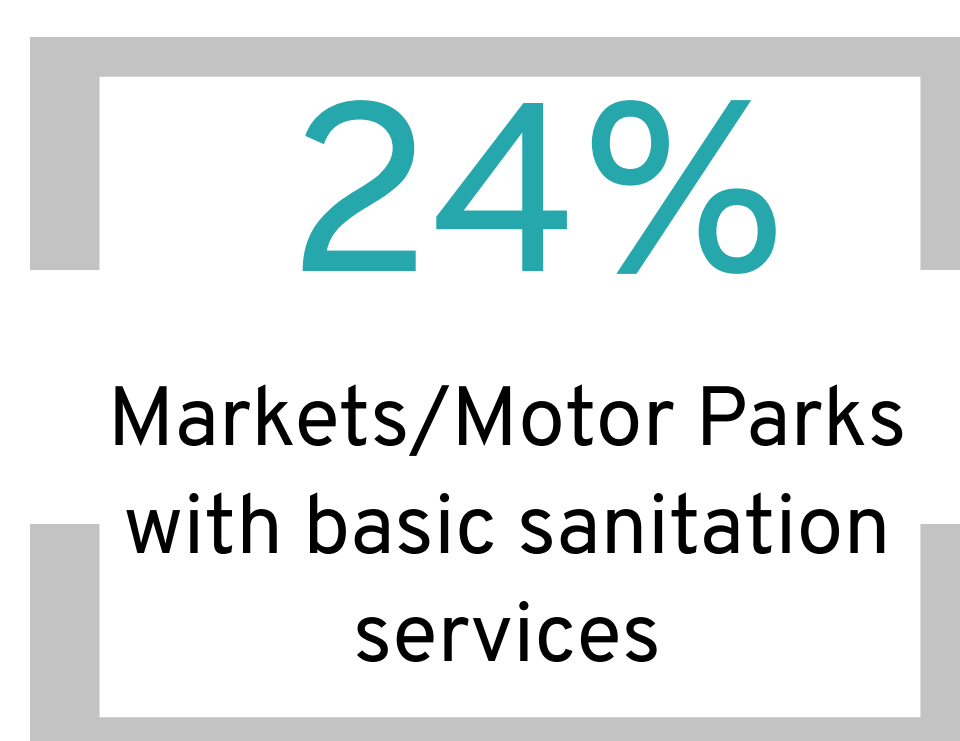
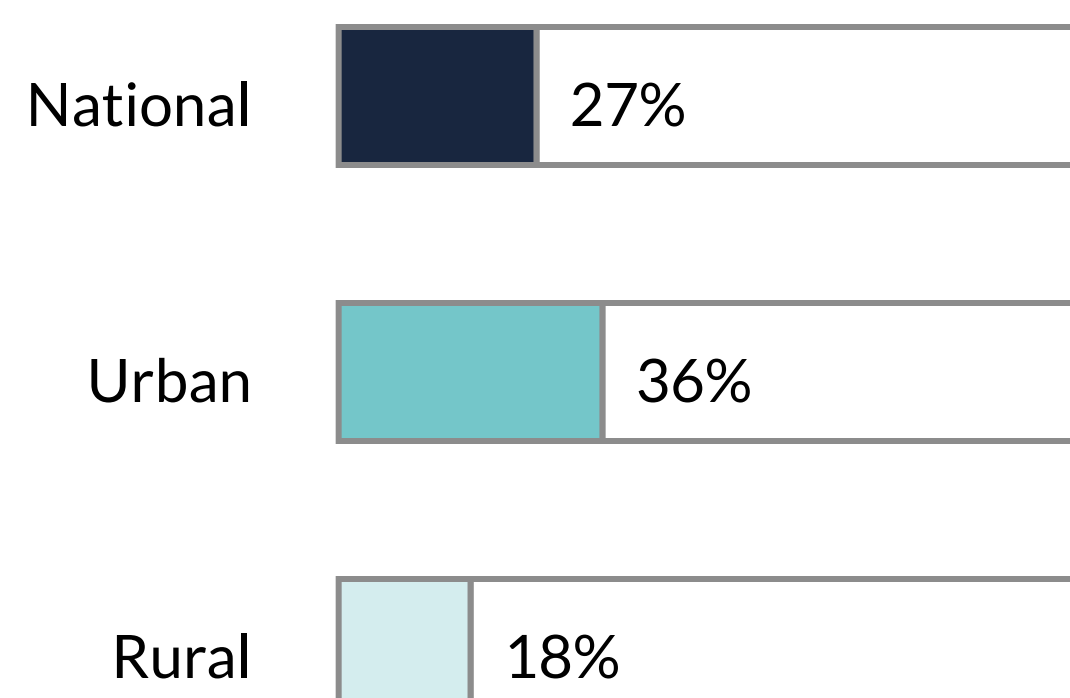
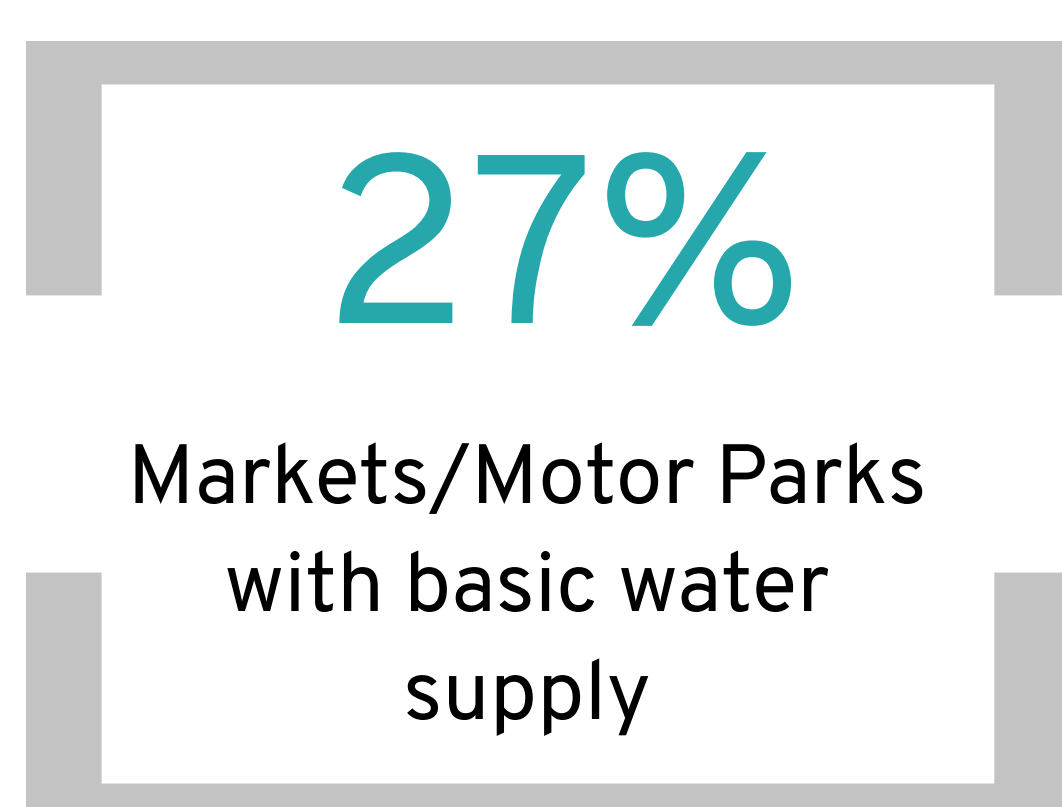


Access to basic Water and Sanitation services in Markets and Motor Parks by Geopolitical Zones



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

About 27 per cent of markets and motor parks in Nigeria have basic water supply services, a quarter have access to basic sanitation services and only 5 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.

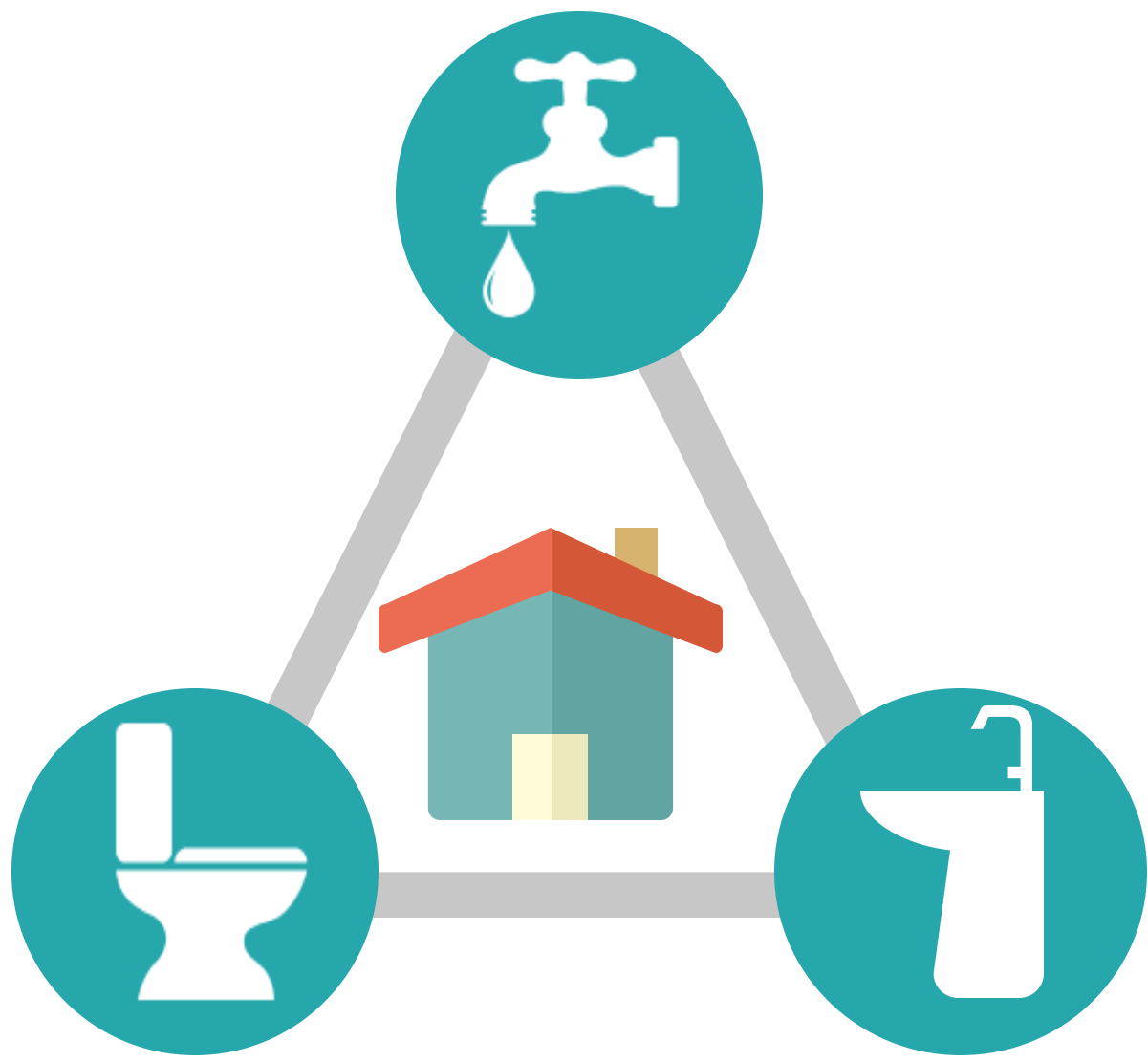




# Household Expenditure on WASH



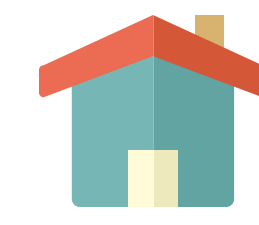
Households in Nigeria spent up to ₦3.3 trillion or \$9 billion on water, sanitation and hygiene services in 2019.



**₦3,282 Billion**  
**\$11 Billion**

is spent by households on water, sanitation and hygiene services annually

## Cost per Household



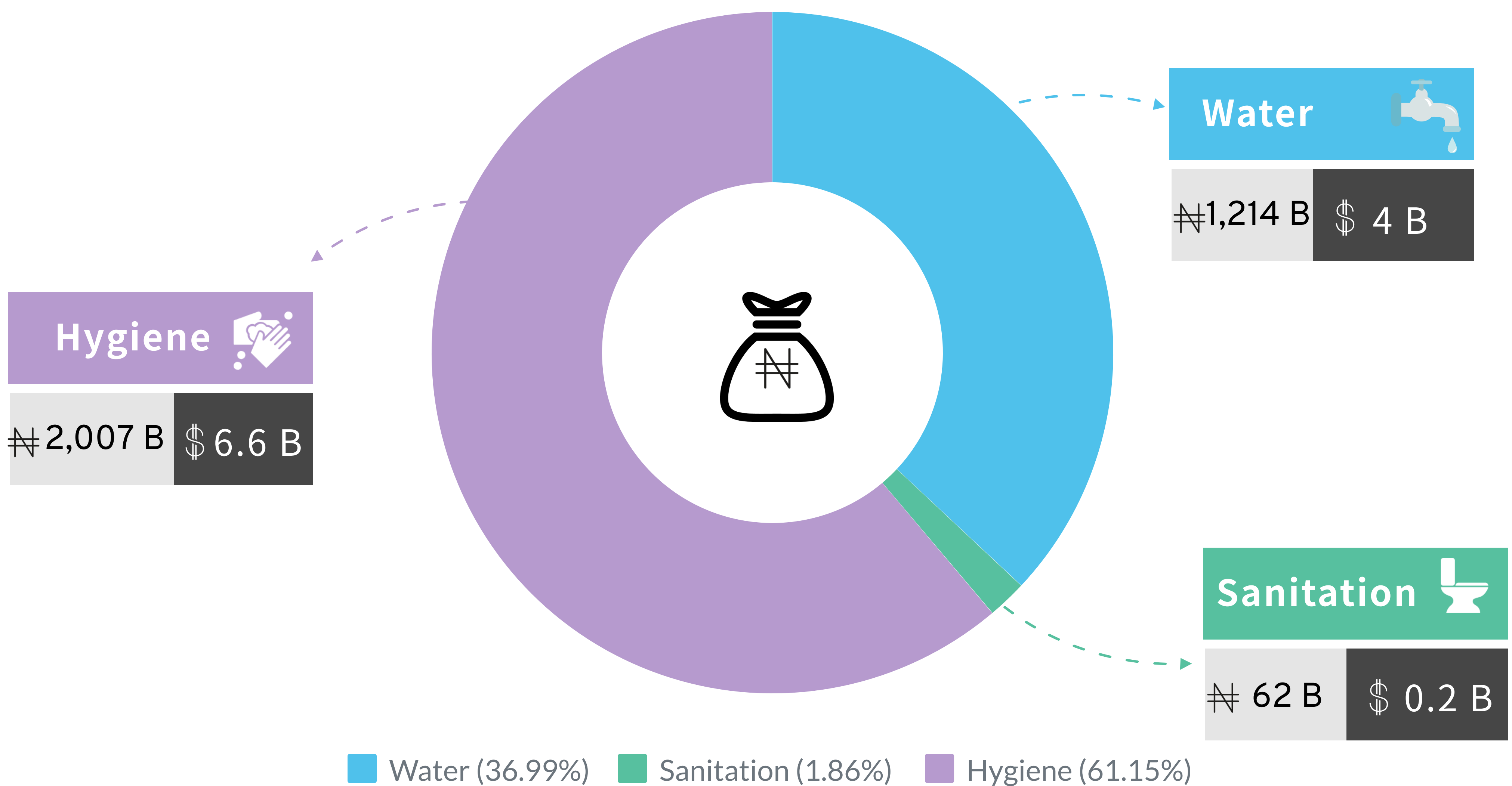
₦81,996 \$ 268

## Cost per Person

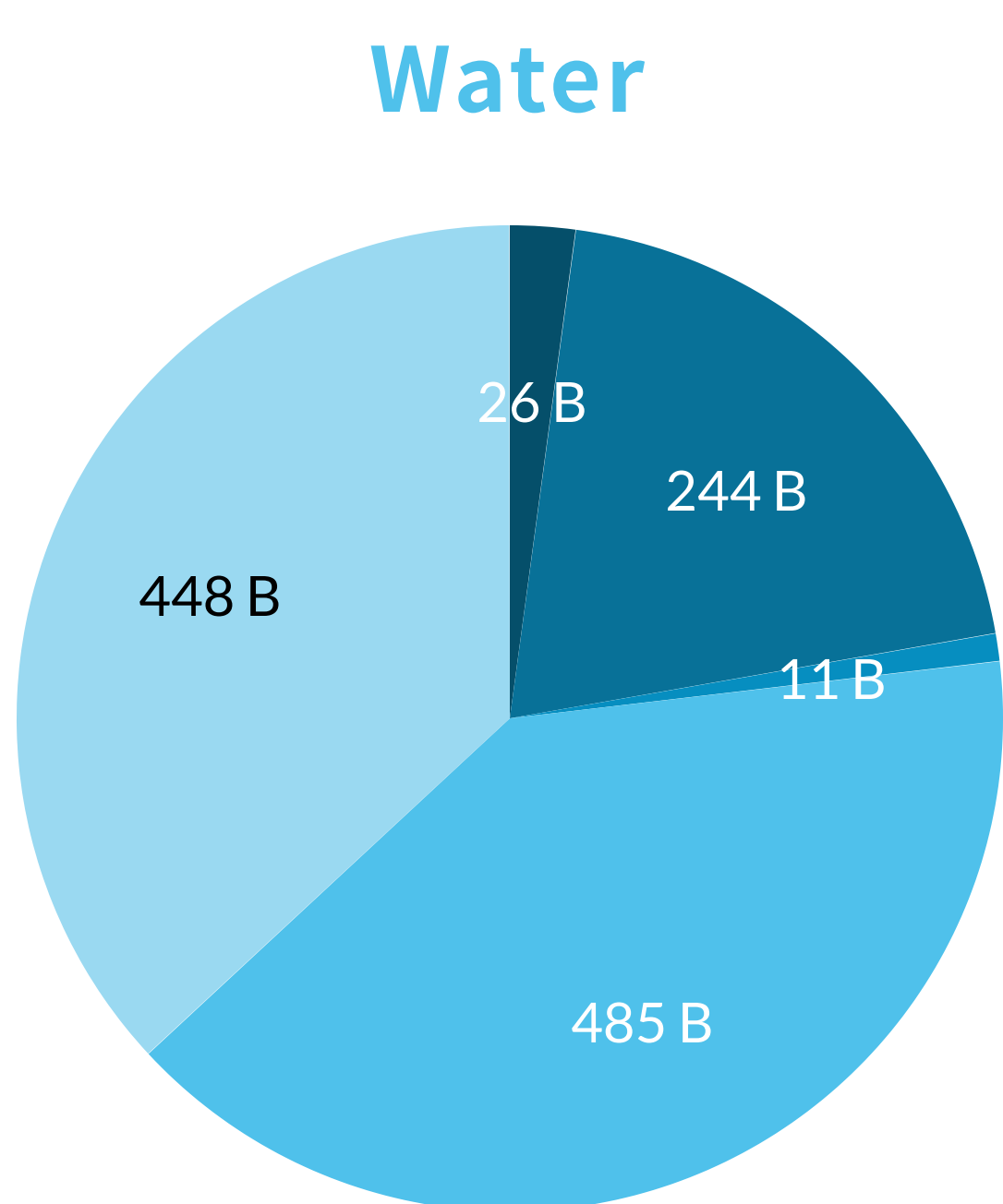


₦16,524 \$ 54

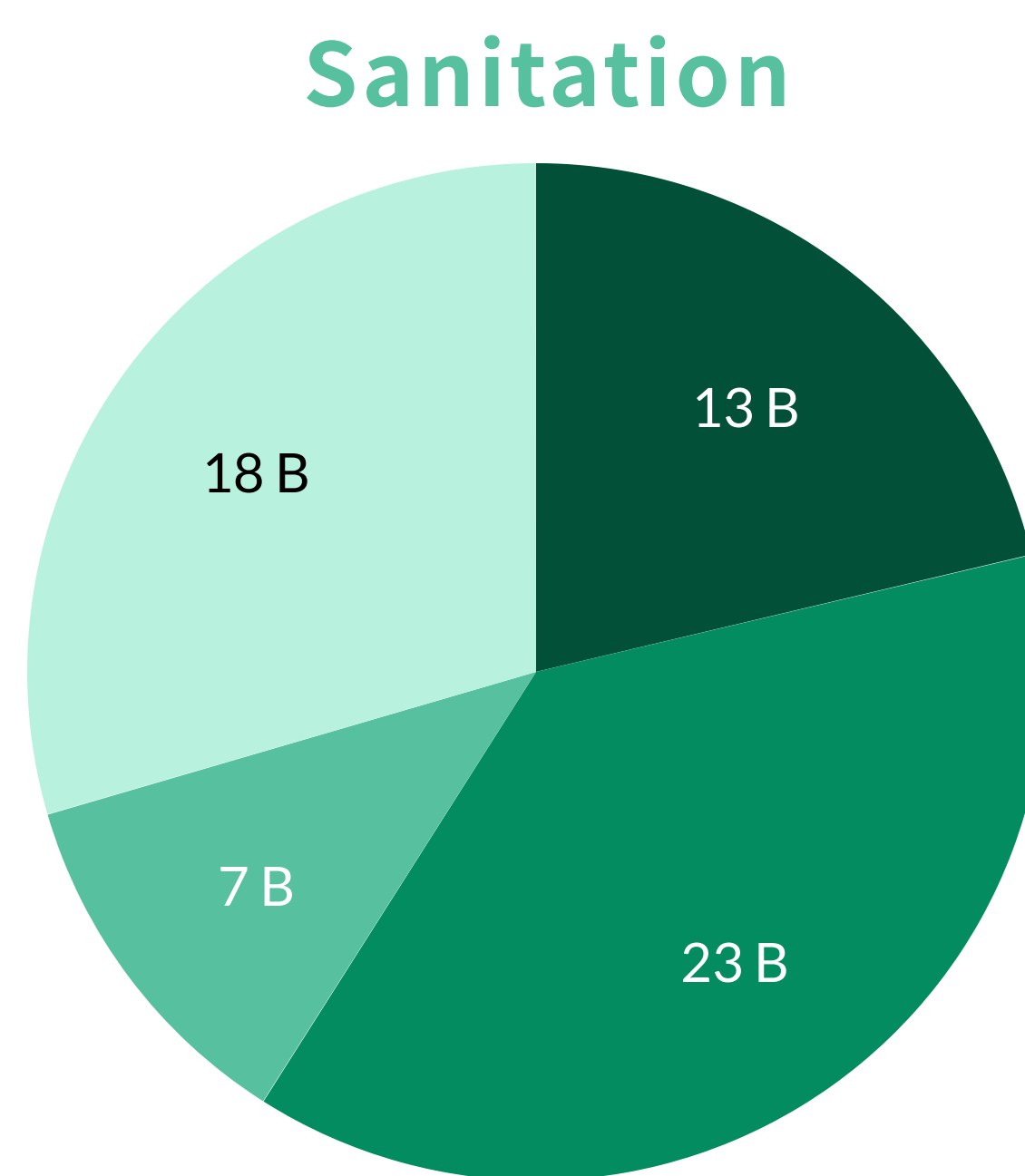
## Breakdown by Sector



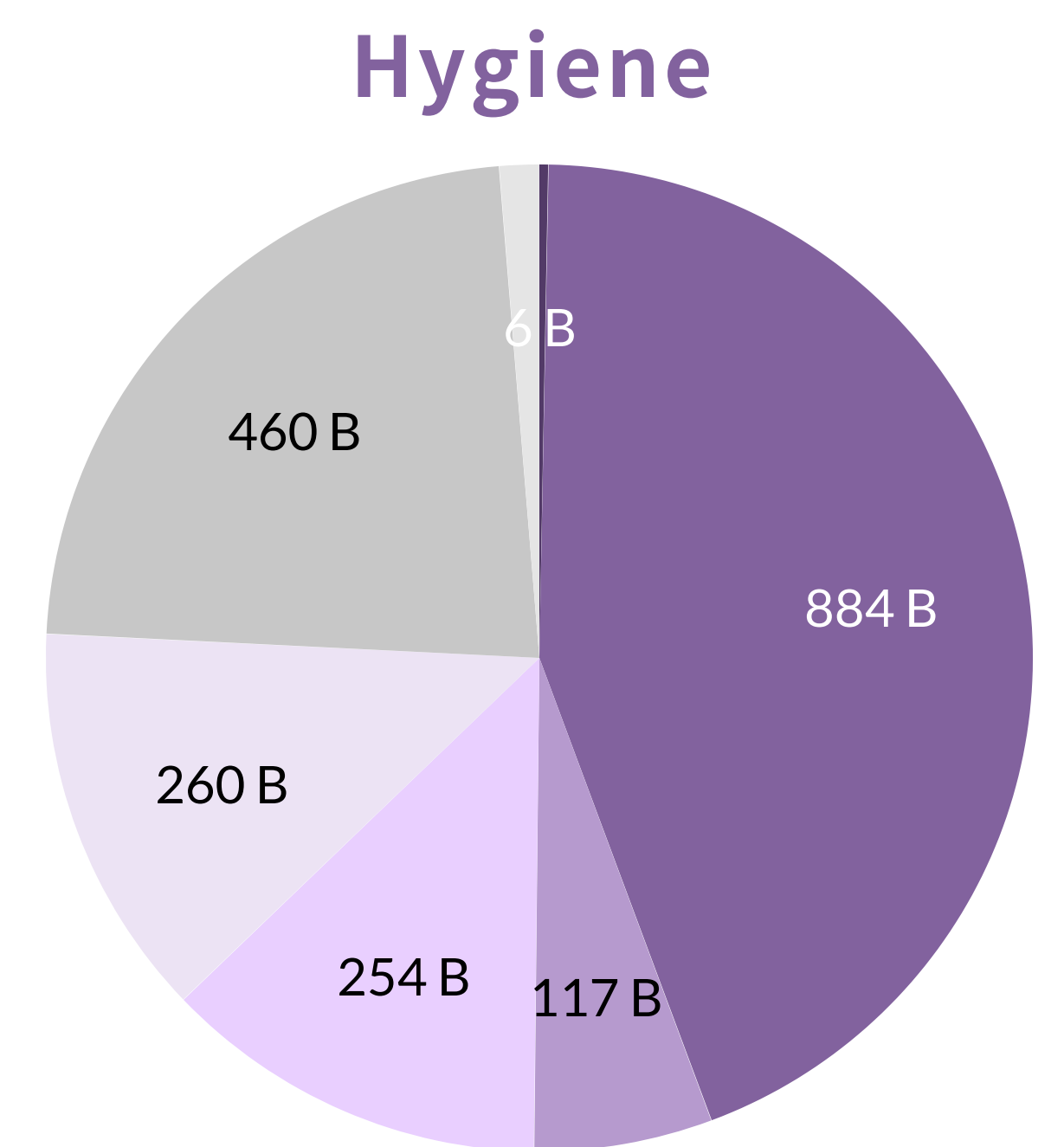
## Breakdown by Service Type (in Naira)



- Construction (2.14%)
- Bills/Levies (20.1%)
- Facility Repairs (0.91%)
- Water Treatment (39.95%)
- Storage and Transport (36.9%)



- Construction (21.31%)
- Bills/Levies (37.7%)
- Toilet Maintenance (11.48%)
- Toilet Emptying (29.51%)



- Construction (0.3%)
- Bathing and Laundry Soap (44.1%)
- Toilet Paper (5.83%)
- Sanitary Pads (12.66%)
- Toothpaste (12.95%)
- Washing Materials & Equip (22.92%)
- Waste Disposal (1.3%)





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