

APPENDIX

Appendix 1: Questionnaire

PERCEPTION OF RURAL DWELLERS ON WATER QUALITY AND ACCESSIBILITY IN ODEDA LGA, OGUN STATE, NIGERIA

SECTION ONE: Socio-Economic Information

Gender	Male [] Female []			
Age				
Marital Status	Single [] Married [] Divorced [] Widowed []			
Education Level	Primary []	Secondary []	Tertiary []	None []
Monthly Income	Below N30,000	N31,000 – N60,000	N61,000 – N90,000	N91,000 – and above
Household Size (total individual count) Specify the number of dependents				
Means of Livelihood	Farming []	Self-employed []	Artisan []	Civil/Public servant []
	Others (Specify)			

SECTION TWO: Water Knowledge and Practices and Perception of Water Quality

A clean water should have odour?

Yes (☐) No (☐) Sometimes (☐)

What should the appearance of clean drinking water be?

Clear and colorless (☐) Slightly colored (☐) Cloudy with visible particles (☐)

A clean water should have a taste?

Yes (☐) No (☐) Sometimes (☐)

Can storage containers or handling affect water quality?

Yes (☐) No (☐) Maybe (☐)

Does clear water still need treatment before drinking?

Yes (☐) No (☐) Sometimes (☐)

What form of water treatment do you practice in your household?

None (☐) Boiling (☐) Chlorination (☐) Filtration (☐) Others (Specify)

How often do you treat water in your household?

Everytime (☐) Sometimes (☐) Rarely (☐)

How would you rate the water quality you use?

Excellent (☐) Good (☐) Fair (☐) Bad (☐) Very Bad (☐)

How often do you experience problems with water colouration?

Very often (☐) Once in a month (☐) Twice in a month (☐) Once in two-three months (☐) Rarely (☐)

How often do you experience problems with water odour?

Very often (☐) Once in a month (☐) Twice in a month (☐) Once in two-three months (☐) Rarely (☐)

How often do you experience problems with water taste?

Very often (☐) Once in a month (☐) Twice in a month (☐) Once in two-three months (☐) Rarely (☐)

Have you had any health risks from water consumption in the last six (6) months?

Yes (☐) No (☐)

If YES, what water-related health concerns?

Diarrhoea: Once () Twice () Three Times () Four times or more ()

Dysentery: Once () Twice () Three Times () Four times or more ()

Typhoid Fever: Once () Twice () Three Times () Four times or more ()

E. Coli.: Once () Twice () Three Times () Four times or more ()

SECTION THREE: Perception of Water Accessibility

What are the sources for your domestic water use (more than one option is allowed)?

Hand-dug well () Borehole () Stream/River () Rainfall harvest () Water Vendors () Others?

Specify

Where is the location of the water facility?

In-compound () Nearby the house () In the neighborhood () Nearest community ()

What is the estimated distance to the water source? _____

How long does it take to walk to the water source (time)? _____

What is your estimated daily water demand/usage (liters)? _____

How much do you spend on domestic water supply daily? _____

Free () Less than N50 () N50 to N100 () More than N100 ()

Water Access and Shortage

How often do you receive water from your primary water source weekly?

Daily () 3-4 times a week () 1-2 times a week () Less than once a week ()

On average, how long does the water supply last when it is available?

Less than 1 hour () 1-5 hours () 6-12 hours () More than 12 hours ()

What time of the day is the water available?

During the day () At night ()

How often did you experience disruption to water access in the last month?

Very often (every day) () Often (several times a week) () Sometimes (several times in a month)
() Seldom (Less than once a month) () Never ()

Are water shortages more prominent in the wet season?

Yes () No ()

Do you have issues with water contamination during the wet season?

Yes () No ()

Are water shortages more prominent in the dry season?

Yes () No ()

Do you have issues with water contamination during the dry season?

Yes () No ()

During shortages, how do you access water?

Buy water from vendors () Fetch water from a nearby stream/river () Use stored water ()

Use a borehole/well () Others ()

How far is it from your home if you use an alternative water source?

Less than 100 meters () 100-500 meters () 501 meters to 1 km () More than 1 km ()

SECTION FOUR:

Source of Water Information

The primary source of information on water information (Radio)?

Yes () No ()

The primary source of information on water information (Internet and Social Media)?

Yes () No ()

The primary source of information on water information (Family and friends)?

Yes () No ()

The primary source of information on water information (Health clinic)?

Yes () No ()

The primary source of information on water information (Extension agent/Government agencies)?

Yes () No ()

The primary source of information on water information (NGOs)?

Yes () No ()

What information about water quality have you learned in the last six months?

Challenges in accessibility

Do you agree that physical barriers, such as **broken pipes**, is a significant challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that physical barriers, such as **poor water quality**, is a significant challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that physical barriers, such as **lack of adequate water points**, is a significant challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that physical barriers, such as **distance to water sources**, is a significant challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that infrastructure issues, such as **inadequate water treatment facilities**, is an essential challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that infrastructure issues, such as **insufficient storage capacity**, is an essential challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that infrastructure issues, such as **poor maintenance**, is an essential challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that infrastructure issues such as **inadequate power supply** is an essential challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that institutional accessibility challenges, such as **government policies**, is an essential challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that institutional accessibility challenges, such as **inefficient resource management**, is an essential challenge in water accessibility?

Yes (☐) No (☐) Maybe (☐)

Do you agree that institutional accessibility challenges, such as **artificial scarcity** is an essential challenges in water accessibility?

Yes () No () Maybe ()

Do you agree that institutional accessibility challenges, such as **Insufficient investment** is an essential challenges in water accessibility?

Yes () No () Maybe ()

Perceived Solutions					
Infrastructure-Based Solutions					
	Most important	Important	Somehow Important	Less Important	Not important at all
Additional community Water Points					
Improved Water Supply Systems					
Increased Water Storage Facilities					
Improved Water Treatment Facilities					
Community-Based Solutions					
Water Conservation					
Community Management					
Water Education					

Community- Led Initiatives					
Policy and Governance Solutions					
Inclusive Decision- Making					
Public-Private Partnerships					
Subsidies and Tariffs					
Increased Investment					
Other perceived Solution					

Hydrocensus

Water Source Type: _____

Location: Latitude: _____ Latitude _____

S/N	Parameter	Unit	WHO limit	15% Margin	Concentration (on site)
1	pH	-	6.5 to 9.2	6 and 9.5	
2	Temperature	Celsius	28	32	
3	TDS	mg/L	500	550	
4	EC	mg/L	1000	1150	
5	Turbidity	NTU	5	6.25	
6	Salinity	mg/L	NA	NA	
7	ORP	millivolts (mV	NA	NA	

Appendix 2: Photo documentation











