

Nigeria

Federal Ministry of Water Resources(FMWR), Federal Government of Nigeria(FGN)

## National Water Supply And Sanitation Baseline Survey-2006

Study Documentation

October 19, 2009

# Metadata Production

Metadata Producer(s)	Federal Ministry of Water Resources (FMWR) , Federal Government of Nigeria (FGN) , Documentation of Study
Production Date	October 19, 2009
Version	Version 1.1(October, 2009)
Identification	DDI-NGA-FMWR-NWSASB-2006-v1.1

This document was generated using the [IHSN Microdata Management Toolkit](#)

# Table of Contents

<a href="#">Overview</a> .....	1
<a href="#">Scope &amp; Coverage</a> .....	2
<a href="#">Producers &amp; Sponsors</a> .....	2
<a href="#">Sampling</a> .....	2
<a href="#">Data Collection</a> .....	3
<a href="#">Data Processing &amp; Appraisal</a> .....	4
<a href="#">Accessibility</a> .....	4
<a href="#">Rights &amp; Disclaimer</a> .....	4
<a href="#">Files Description</a> .....	5
<a href="#">Water supply sanitation</a> .....	5
<a href="#">Water supply sanitation_rural</a> .....	5
<a href="#">Water supply sanitation_small town</a> .....	5
<a href="#">Water supply sanitation-urban</a> .....	6
<a href="#">Related Disease by state</a> .....	6
<a href="#">Variables List</a> .....	8
<a href="#">Water supply sanitation</a> .....	8
<a href="#">Water supply sanitation_rural</a> .....	8
<a href="#">Water supply sanitation_small town</a> .....	8
<a href="#">Water supply sanitation-urban</a> .....	9
<a href="#">Related Disease by state</a> .....	9
<a href="#">Variables Description</a> .....	11
<a href="#">Water supply sanitation</a> .....	11
<a href="#">Water supply sanitation_rural</a> .....	12
<a href="#">Water supply sanitation_small town</a> .....	14
<a href="#">Water supply sanitation-urban</a> .....	16
<a href="#">Related Disease by state</a> .....	18
<a href="#">Documentation</a> .....	23



Nigeria ()  
 National Water Supply And Sanitation Baseline Survey-2006 (NWSASB-2006)  
 No translation

Overview	
Type	Other Household Health Survey [hh/hea]
Identification	NGA-FMWR-NWSASB-2006-v1.1
Version	Production Date: 2009-10-19 version 1.1(October, 2009) <u>Notes</u> Version 1.0: Data used to generate the tables and the report (June, 2008) Version 1.1: Adding litreal questions and variables labeling (October, 2009)
Series	The main objective of this assignment is to document the proportion of Nigerians that have access to safe water and sanitation facilities and those who otherwise, do not have
<u>Abstract</u> The main objective of this assignment is to document the proportion of Nigerians that have access to safe water and sanitation facilities and those who otherwise, do not have, according to the following definitions: <ol style="list-style-type: none"> <li>i. Access to Water Supply: The availability of at least 20litres per person per day of improved water supply from a source within 250 metres of user's dwelling.</li> <li>ii. Access to Sanitation: Sanitation can be defined as the availability of improved disposal facilities of human wastes that can effectively prevent human, animal and insect contact with the human wastes.</li> <li>iii. Improved Water Supply: The following technologies are included in the assessment as representing improved water supply: a) Household Connections, b) Public standpipes, Borehole, Protected dug Well, Protected Spring, and Rainwater harvesting.</li> <li>iv. Not- Improved Water Supply: The following technologies are considered "not improved": a) Unprotected well, b) Unprotected spring, Vendor-provided water, c) Bottled water, Tanker truck-provided water, d) streams and ponds.</li> <li>v. Improved Sanitation: The following technologies are considered "improved", a) Connection to a public sewer, b) Connection to septic system, c) Pour-flush latrine, d) Simple pit latrine* e) Sanplat*, f) Ventilated improved pit latrine.</li> <li>vi. Not-Improved Sanitation: The following technologies are considered "not improved": a) Service or bucket latrines (where excreta are manually removed), b) Latrines with an open pit, c) defecation in</li> </ol>	
Kind of Data	Sample survey data [ssd]
Unit of Analysis	State and Lga analysis

Scope & Coverage	
<p><u>Scope</u></p> <p>The surveys are to be carried out in all settlements that should be properly classified as:</p> <p>Rural Areas are settlements with a population of less than 5000 people</p> <p>Small Towns are settlements with a population between 5000 and 20,000 people</p> <p>Urban Areas and Towns with a population more than 20,000 people</p> <p>State Capitals political capitals of the 36 States and FCT in Nigeria</p> <p>Form 01 (Water Supply Facility Survey): To capture the location, attributes, and operational status of water supply facilities.</p> <p>Form 02 (Water Supply Agency Operational Survey): To collect data on the profile of water agencies in the state, in terms of production assets, capacity utilization, manpower; and financial sustainability.</p> <p>Form 03 (Sanitation Facility Survey): To capture the location, types and conditions of sanitation facilities.</p> <p>Form 04 (Water Related Diseases Survey): To collect data on reported cases of water related diseases from health institutions.</p> <p>Form 05 (Household Survey): To capture data on the proportion of households that have access to safe drinking water and sanitation facilities and prevalence of water related diseases in each community</p>	
Topics	general health [8.4], specific diseases and medical conditions [8.9]
<p><u>Geographic Coverage</u></p> <p>National Zone State Lga</p>	
<p><u>Universe</u></p> <p>Households in all the 8,800 Political Wards, a total of twenty-two (22) houses for the ward</p>	

Producers & Sponsors	
Primary Investigator(s)	Federal Ministry of Water Resources(FMWR), Federal Government of Nigeria(FGN)
Other Acknowledgment(s)	National Bureau of Statistics (NBS) , Metadata documentation , Federal Government of Nigeria (FGN)

Sampling
<p><u>Sampling Procedure</u></p> <p>Households in all the 8,800 Political Wards spread across the 774 LGAs in 36 states and FCT will be surveyed. The Baseline Consultants shall administer survey questionnaires to take stock of sources of drinkable water, the volume/cost of water consumption; the sanitation facility and occurrences of water related diseases in household surveyed.</p>

## SELECTION OF LOCATION AND HOUSEHOLDS

The Baseline Consultants shall sensitize members of the community through the councillors and other recognized leaders about the exercise to forestall any suspicion or misconception about the survey. Baseline supervisors shall document the survey process in each community by stating the names of councillors, community leaders met, list of all communities identified in each political ward and the ones selected for survey, without forgetting to state all the problems encountered in the survey process.

A typical Nigerian settlement, regardless of its population is either a multi community ward or a multi ward community. But in either case, the Baseline Consultants should ensure that the selection of the households take into cognisance the geographical spread and socio-economic variance of the ward. It should be noted that in every ward, the selected houses shall be enumerated through a transect walk and the first sampling element, which shall be the first house on the right or left, will determine the subsequent ones to be selected.

### MULTI COMMUNITY WARD

The Baseline Consultants shall go through the list of all communities or villages in each ward out of which two (2) shall be randomly selected. Starting with the first community, a minimum of eleven (11) houses shall be systematically selected from the listed households, after determining the sample interval. The sampling interval for the community shall be determined by dividing the total number of houses in it by eleven (11). This process shall be repeated for the second community to arrive at a total of twenty-two (22) houses for the ward.

### MULTI WARD COMMUNITY

The Baseline Consultants shall go through the list of streets, quarters, discrete areas, housing estates, or haphazardly located homes with no identifiable streets in the ward, where a random sample of 22 houses shall be systematically selected.

However, where there are no streets, the Baseline Consultants shall demarcate the ward into appropriate blocks and select two blocks randomly. The houses in each block shall be listed and eleven (11) houses systematically selected.

#### Deviations from Sample Design

No deviations

#### Response Rate

Unable to calculate the response rate because the report was not accessible as at the time of archiving

#### Weighting

The data has been weighted but the variable used was not in the data set  
Note that the data set are not raw data.

## Data Collection

Data Collection Mode	Face-to-face [f2f]
----------------------	--------------------

#### Data Collection Notes

The Baseline Consultants shall use five forms to capture all the relevant data on water supply and sanitation and the water related diseases. While the administrators are using the questionnaires to extract data from the respondents, the GIS field officer will be geo-referencing the locations of water and sanitation facilities by reading the coordinates of such locations with hand held GPS instrument of any brand or make with 3 - 5 meters precision.

The recommended GIS software for this project is ArcView or ArcGIS and the digital maps must be in ArcView readable and JPEG format. Project files will be created for states, layouts and view for LGA. The symbols and colour codes to be used to represent promoters of water supply and sanitation facilities .e.g. well, boreholes and water plants on the map shall be as follows:

#### Questionnaires

The data collection forms are:

1. Form 01 (Water Supply Facility Survey): To capture the location, attributes, and operational status of water supply facilities.
2. Form 02 (Water Supply Agency Operational Survey): To collect data on the profile of water agencies in the state, in terms of production assets, capacity utilization, manpower; and financial sustainability.
3. Form 03 (Sanitation Facility Survey): To capture the location, types and conditions of sanitation facilities.
4. Form 04 (Water Related Diseases Survey): To collect data on reported cases of water related diseases from health institutions.
5. Form 05 (Household Survey): To capture data on the proportion of households that have access to safe drinking water and sanitation facilities and prevalence of water related diseases in each community.

#### Supervision

The database software recommended is MS Access 2000. The MIS Consultants have developed an application software, which has an MS Access database and data entry forms (interfaces) that are very similar to the five questionnaires, which will be used by the Baseline Consultants to capture all the data on the administered questionnaires.

The Baseline Consultants shall submit field data and maps (field returns) on CDs in MS Access and ArcView respectively. These data shall then be processed, analyzed and upsized to Oracle format to produce the National Water Supply and Sanitation Database by the MIS Consultant.

### Data Processing & Appraisal

#### Data Editing

The report was not accessible as at the time of archiving

#### Other Processing

The report was not accessible as at the time of archiving

#### Estimates of Sampling Error

The report was not accessible as at the time of archiving

#### Other Forms of Data Appraisal

The report was not accessible as at the time of archiving

### Accessibility

Access Authority

Federal Ministry of Water Resources (Federal Government of Nigeria (FGN))

### Rights & Disclaimer

Copyright

© (FMWR) 2009



## Files Description

Dataset contains 5 file(s)

Water supply sanitation	
# Cases	44
# Variable(s)	11
File Structure	Type: relational Key(s): V2 (State)
<u>File Content</u> The file contains data relating to water supply sanitation	
<u>Producer</u> Federal Ministry of Water Resources	
<u>Version</u> Version 1.1	
<u>Processing Checks</u> Checking of all invalids codes were corrected	
<u>Missing Data</u> All missing data were * asterisk.	

Water supply sanitation_rural	
# Cases	44
# Variable(s)	11
File Structure	Type: relational Key(s): V2 (State)
<u>File Content</u> The file contains data relating to water supply sanitation	
<u>Producer</u> Federal Ministry of Water Resources	
<u>Version</u> Version 1.1	
<u>Processing Checks</u> Checking of all invalids codes were corrected	
<u>Missing Data</u> All missing data were * asterisk.	

Water supply sanitation_small town	
# Cases	44

National Water Supply And Sanitation Baseline Survey-2006 - Files Description

# Variable(s)	11
File Structure	Type: relational Key(s): V2 (State)
<u>File Content</u> The file contains data relating to water supply sanitation	
<u>Producer</u> Federal Ministry of Water Resources	
<u>Version</u> Version 1.1	
<u>Processing Checks</u> Checking of all invalids codes were corrected	
<u>Missing Data</u> All missing data were * asterisk.	

<b>Water supply sanitation- urban</b>	
# Cases	44
# Variable(s)	10
File Structure	Type: relational Key(s): V2 (State)
<u>File Content</u> The file contains data relating to water supply sanitation	
<u>Producer</u> Federal Ministry of Water Resources	
<u>Version</u> Version 1.1	
<u>Processing Checks</u> Checking of all invalids codes were corrected	
<u>Missing Data</u> All missing data were * asterisk.	

<b>Related Disease by state</b>	
# Cases	38
# Variable(s)	18
File Structure	Type: relational Key(s): V1 (Zonal Group) , V2 (State)
<u>File Content</u> The file contains data relating to water supply sanitation	
<u>Producer</u>	

National Water Supply And Sanitation Baseline Survey-2006 - Files Description

Fedral Ministry of Water Resources

Version

Verson 1.1

Processing Checks

Checking of all invalids codes were corrected

Missing Data

All missing data were \* asterisk.

## Variables List

Dataset contains 61 variable(s)

File Water supply sanitation							
#	Name	Label	Type	Format	Valid	Invalid	Question
1	<a href="#">V1</a>	Zonal group	discrete	character-15	44	0	-
2	<a href="#">V2</a>	State	discrete	character-15	44	0	State
3	<a href="#">V3</a>	Population 2006	continuous	numeric-10.2	44	0	-
4	<a href="#">V4</a>	Total estimated water demand	continuous	numeric-10.2	44	0	-
5	<a href="#">V5</a>	Installed capacity (m3/d)	continuous	numeric-10.2	44	0	-
6	<a href="#">V6</a>	Current output (m3/d)	continuous	numeric-10.2	44	0	-
7	<a href="#">V7</a>	% access to water	continuous	numeric-10.2	44	0	-
8	<a href="#">V8</a>	Population access to water	continuous	numeric-10.2	44	0	-
9	<a href="#">V9</a>	% access to sanitation	continuous	numeric-10.2	44	0	-
10	<a href="#">V10</a>	Population access to sanitation	continuous	numeric-10.2	44	0	-
11	<a href="#">V11</a>	% of national population	continuous	numeric-10.2	6	38	-

File Water supply sanitation_rural							
#	Name	Label	Type	Format	Valid	Invalid	Question
1	<a href="#">V1</a>	Zonal group	discrete	character-15	44	0	-
2	<a href="#">V2</a>	State	discrete	character-15	44	0	State
3	<a href="#">V3</a>	Population 2006	continuous	numeric-10.0	44	0	-
4	<a href="#">V4</a>	Total estimated water demand	continuous	numeric-10.2	44	0	-
5	<a href="#">V5</a>	Installed capacity (m3/d)	continuous	numeric-10.2	38	6	-
6	<a href="#">V6</a>	Current output (m3/d)	continuous	numeric-10.2	43	1	-
7	<a href="#">V7</a>	% access to water	continuous	numeric-10.2	44	0	-
8	<a href="#">V8</a>	Population access to water	continuous	numeric-10.2	44	0	-
9	<a href="#">V9</a>	% access to sanitation	continuous	numeric-10.2	44	0	-
10	<a href="#">V10</a>	Population access to sanitation	continuous	numeric-10.2	44	0	-
11	<a href="#">V11</a>	% of national population	continuous	numeric-10.2	6	38	-

File Water supply sanitation_small town							
#	Name	Label	Type	Format	Valid	Invalid	Question
1	<a href="#">V1</a>	Zonal group	discrete	character-15	44	0	-

National Water Supply And Sanitation Baseline Survey-2006 - Variables List

File Water supply sanitation_small town (cont.)							
#	Name	Label	Type	Format	Valid	Invalid	Question
2	<a href="#">V2</a>	State	discrete	character-15	44	0	State
3	<a href="#">V3</a>	Population 2006	continuous	numeric-10.0	44	0	-
4	<a href="#">V4</a>	Total estimated water demand	continuous	numeric-10.2	44	0	-
5	<a href="#">V5</a>	Installed capacity (m3/d)	continuous	numeric-10.2	39	5	-
6	<a href="#">V6</a>	Current output (m3/d)	continuous	numeric-10.2	44	0	-
7	<a href="#">V7</a>	% access to water	continuous	numeric-10.2	37	7	-
8	<a href="#">V8</a>	Population access to water	continuous	numeric-10.2	44	0	-
9	<a href="#">V9</a>	% access to sanitation	continuous	numeric-10.2	37	7	-
10	<a href="#">V10</a>	Population access to sanitation	continuous	numeric-10.2	44	0	-
11	<a href="#">V11</a>	% of national population	continuous	numeric-10.2	6	38	-

File Water supply sanitation- urban							
#	Name	Label	Type	Format	Valid	Invalid	Question
1	<a href="#">V1</a>	Zonal group	discrete	character-15	44	0	-
2	<a href="#">V2</a>	State	discrete	character-15	44	0	State
3	<a href="#">V3</a>	Population 2006	continuous	numeric-10.0	44	0	-
4	<a href="#">V4</a>	Total estimated water demand	continuous	numeric-10.2	44	0	-
5	<a href="#">V5</a>	Installed capacity (m3/d)	continuous	numeric-10.2	39	5	-
6	<a href="#">V6</a>	Current output (m3/d)	continuous	numeric-10.2	44	0	-
7	<a href="#">V7</a>	% access to water	continuous	numeric-10.2	37	7	-
8	<a href="#">V8</a>	Population access to water	continuous	numeric-10.2	44	0	-
9	<a href="#">V9</a>	% access to sanitation	continuous	numeric-10.2	37	7	-
10	<a href="#">V10</a>	Population access to sanitation	continuous	numeric-10.2	44	0	-

File Related Disease by state							
#	Name	Label	Type	Format	Valid	Invalid	Question
1	<a href="#">V1</a>	Zonal Group	discrete	character-15	38	0	-
2	<a href="#">V2</a>	State	discrete	character-12	38	0	State
3	<a href="#">V3</a>	Diarrhoea	continuous	numeric-8.0	30	8	Diarrhea1. .....Yes or No
4	<a href="#">V4</a>	G/ Worm	continuous	numeric-8.0	30	8	Guinea worm.....Yes or No

National Water Supply And Sanitation Baseline Survey-2006 - Variables List

File Related Disease by state (cont.)							
#	Name	Label	Type	Format	Valid	Invalid	Question
5	<a href="#">V5</a>	Dysentery	continuous	numeric-8.0	30	8	Dysentery.....Yes or No
6	<a href="#">V6</a>	Typhoid Fever	continuous	numeric-8.0	30	8	Typhoid Fever.....Yes or No
7	<a href="#">V7</a>	Malaria	continuous	numeric-8.0	30	8	Malaria.....Yes or No
8	<a href="#">V8</a>	Schistosomiasis	continuous	numeric-8.0	30	8	Schistosomiasis..... or No
9	<a href="#">V9</a>	Blood In Urine	continuous	numeric-8.0	38	0	Blood In Urine.....Yes or No
10	<a href="#">V10</a>	Scabies	continuous	numeric-8.0	30	8	Scabies.....Yes or No
11	<a href="#">V11</a>	R/ Worm	continuous	numeric-8.0	30	8	Ring worm.....Yes or No
12	<a href="#">V12</a>	Cholera	continuous	numeric-8.0	30	8	Cholera.....Yes or No
13	<a href="#">V13</a>	Trachoma	continuous	numeric-8.0	30	8	Trachoma.....Yes or No
14	<a href="#">V14</a>	Hepatitis/B	continuous	numeric-8.0	30	8	Hepatitis B.....Yes or No
15	<a href="#">V15</a>	Streptococci	continuous	numeric-8.0	30	8	Streptococci.....Yes or No
16	<a href="#">V16</a>	Onchocerciasis	continuous	numeric-8.0	30	8	Onchocerciasis.....Yes or No
17	<a href="#">V17</a>	Other	continuous	numeric-8.0	28	10	Other water related diseases (specify) .....Yes or No
18	<a href="#">V18</a>	Total	continuous	numeric-8.0	38	0	-

## Variables Description

Dataset contains 61 variable(s)

### File Water supply sanitation

#1 V1: Zonal group			
Information	[Type= discrete] [Format=character] [Missing=* / Ú (%)]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]		
Recoding and Derivation	Zonal Group		
Value	Label	Cases	Percentage
National	National	1	2.3%
North Central	North Central	8	18.2%
North East	North East	7	15.9%
North West	North West	8	18.2%
South East	South East	6	13.6%
South South	South South	7	15.9%
South West	South West	7	15.9%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#2 V2: State	
Information	[Type= discrete] [Format=character] [Missing=* / Ú (%)]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]
Literal question	State
Frequency table not shown (44 Modalities)	

#3 V3: Population 2006	
Information	[Type= continuous] [Format=numeric] [Range= 1405201-140003542] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=9545696.045 /-] [StdDev=21430932.128 /-]
Recoding and Derivation	Population 2006

#4 V4: Total estimated water demand	
Information	[Type= continuous] [Format=numeric] [Range= 50099-5173250.88] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=352721.651 /-] [StdDev=794894.201 /-]
Recoding and Derivation	Total Estimated Water Demand

#5 V5: Installed capacity (m3/d)	
Information	[Type= continuous] [Format=numeric] [Range= 21679.5-6487013.53] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=442296.377 /-] [StdDev=1023290.405 /-]

## File Water supply sanitation (cont.)

## #5 V5: Installed capacity (m3/d) (cont.)

Recoding and Derivation	Installed Capacity (m3/d)
-------------------------	---------------------------

## #6 V6: Current output (m3/d)

Information	[Type= continuous] [Format=numeric] [Range= 5159.7-2597516.19] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=177103.377 /-] [StdDev=419694.43 /-]
Recoding and Derivation	Current Output (m3/d)

## #7 V7: % access to water

Information	[Type= continuous] [Format=numeric] [Range= 4.56-78.4] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=49.585 /-] [StdDev=17.177 /-]
Recoding and Derivation	% Access to Water

## #8 V8: Population access to water

Information	[Type= continuous] [Format=numeric] [Range= 168583.154-69736288.7] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=4754746.954 /-] [StdDev=10709972.157 /-]
Recoding and Derivation	Population Access to Water

## #9 V9: % access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 13-98.5] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=56.629 /-] [StdDev=19.656 /-]
Recoding and Derivation	% Access to Sanitation

## #10 V10: Population access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 221436.54-86364981.9] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=5888521.489 /-] [StdDev=13431791.76 /-]
Recoding and Derivation	Population Access to Sanitation

## #11 V11: % of national population

Information	[Type= continuous] [Format=numeric] [Range= 11.7009389-25.5614561] [Missing=*]
Statistics [NW/ W]	[Valid=6 /-] [Invalid=38 /-] [Mean=16.667 /-] [StdDev=5.104 /-]
Recoding and Derivation	% of National Population



## File Water supply sanitation\_rural

## #1 V1: Zonal group

Information	[Type= discrete] [Format=character] [Missing=*/k](,%)		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]		
Recoding and Derivation	Zonal Group		
Value	Label	Cases	Percentage
National	National	1	2.3%
North Central	North Central	8	18.2%
North East	North East	7	15.9%
North West	North West	8	18.2%
South East	South East	6	13.6%
South South	South South	7	15.9%
South West	South West	7	15.9%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

## #2 V2: State

Information	[Type= discrete] [Format=character] [Missing=*/k](,%)		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]		
Literal question	State		
Frequency table not shown (44 Modalities)			

## #3 V3: Population 2006

Information	[Type= continuous] [Format=numeric] [Range= 82979-67054562] [Missing=*]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=4571901.955 /-] [StdDev=10449504.622 /-]		
Recoding and Derivation	Population 2006		

## #4 V4: Total estimated water demand

Information	[Type= continuous] [Format=numeric] [Range= 2489-1352573.72] [Missing=*]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=92220.935 /-] [StdDev=210238.05 /-]		
Recoding and Derivation	Total Estimated Water Demand		

## #5 V5: Installed capacity (m3/d)

Information	[Type= continuous] [Format=numeric] [Range= 1536-1099329.8] [Missing=*]		
Statistics [NW/ W]	[Valid=38 /-] [Invalid=6 /-] [Mean=86789.195 /-] [StdDev=188345.405 /-]		
Recoding and Derivation	Installed Capacity (m3/d)		

## File Water supply sanitation\_rural (cont.)

## #6 V6: Current output (m3/d)

Information	[Type= continuous] [Format=numeric] [Range= 897-360870.3] [Missing=*]
Statistics [NW/ W]	[Valid=43 /-] [Invalid=1 /-] [Mean=25176.998 /-] [StdDev=59680.414 /-]
Recoding and Derivation	Current Output (m3/d)

## #7 V7: % access to water

Information	[Type= continuous] [Format=numeric] [Range= 2.59-100] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=44.799 /-] [StdDev=18.707 /-]
Recoding and Derivation	% Access to Water

## #8 V8: Population access to water

Information	[Type= continuous] [Format=numeric] [Range= 20744.75-28304544.1] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=1929855.283 /-] [StdDev=4355802.956 /-]
Recoding and Derivation	Population Access to Water

## #9 V9: % access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 10.51-93.05] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=46.997 /-] [StdDev=22.962 /-]
Recoding and Derivation	% Access to Sanitation

## #10 V10: Population access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 66595.165-33855696.7] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=2308342.959 /-] [StdDev=5473160.108 /-]
Recoding and Derivation	Population Access to Sanitation

## #11 V11: % of national population

Information	[Type= continuous] [Format=numeric] [Range= 5.02372381-33.1262785] [Missing=*]
Statistics [NW/ W]	[Valid=6 /-] [Invalid=38 /-] [Mean=16.667 /-] [StdDev=9.506 /-]
Recoding and Derivation	% of National Population

## File Water supply sanitation\_small town

#1 V1: Zonal group			
Information	[Type= discrete] [Format=character] [Missing=*/kÚ(,‰]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]		
Recoding and Derivation	Zonal Group		
Value	Label	Cases	Percentage
National	National	1	2.3%
North Central	North Central	8	18.2%
North East	North East	7	15.9%
North West	North West	8	18.2%
South East	South East	6	13.6%
South South	South South	7	15.9%
South West	South West	7	15.9%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

#2 V2: State	
Information	[Type= discrete] [Format=character] [Missing=*/kÚ(,‰]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]
Literal question	State
Frequency table not shown (44 Modalities)	

#3 V3: Population 2006	
Information	[Type= continuous] [Format=numeric] [Range= 192662-26030900] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=1774834.091 /-] [StdDev=3993583.377 /-]
Recoding and Derivation	Population 2006

#4 V4: Total estimated water demand	
Information	[Type= continuous] [Format=numeric] [Range= 4521.3-911063.78] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=62117.985 /-] [StdDev=142606.743 /-]
Recoding and Derivation	Total Estimated Water Demand

#5 V5: Installed capacity (m3/d)	
Information	[Type= continuous] [Format=numeric] [Range= 1915-1065831] [Missing=*]
Statistics [NW/ W]	[Valid=39 /-] [Invalid=5 /-] [Mean=81987 /-] [StdDev=177330.279 /-]
Recoding and Derivation	Installed Capacity (m3/d)

## File Water supply sanitation\_small town (cont.)

## #6 V6: Current output (m3/d)

Information	[Type= continuous] [Format=numeric] [Range= 295-340714.3] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=23230.52 /-] [StdDev=54308.573 /-]
Recoding and Derivation	Current Output (m3/d)

## #7 V7: % access to water

Information	[Type= continuous] [Format=numeric] [Range= 5.09-85] [Missing=*]
Statistics [NW/ W]	[Valid=37 /-] [Invalid=7 /-] [Mean=50.529 /-] [StdDev=21.609 /-]
Recoding and Derivation	% Access to Water

## #8 V8: Population access to water

Information	[Type= continuous] [Format=numeric] [Range= 27329.6861-13614652.2676] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=928271.746 /-] [StdDev=2110605.794 /-]
Recoding and Derivation	Population Access to Water

## #9 V9: % access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 10.1-93.42] [Missing=*]
Statistics [NW/ W]	[Valid=37 /-] [Invalid=7 /-] [Mean=53.719 /-] [StdDev=22.753 /-]
Recoding and Derivation	% Access to Sanitation

## #10 V10: Population access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 46465.965-14262936.1994] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=972472.923 /-] [StdDev=2214483.865 /-]

## #11 V11: % of national population

Information	[Type= continuous] [Format=numeric] [Range= 9.11679964-22.8060497] [Missing=*]
Statistics [NW/ W]	[Valid=6 /-] [Invalid=38 /-] [Mean=16.667 /-] [StdDev=5.568 /-]
Recoding and Derivation	% of National Population

## File Water supply sanitation- urban

### #1 V1: Zonal group

Information	[Type= discrete] [Format=character] [Missing=*/+"; ,%]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]		
Recoding and Derivation	Zonal Group		
Value	Label	Cases	Percentage
National	National	1	2.3%
North Central	North Central	8	18.2%
North East	North East	7	15.9%
North West	North West	8	18.2%
South East	South East	6	13.6%
South South	South South	7	15.9%
South West	South West	7	15.9%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

### #2 V2: State

Information	[Type= discrete] [Format=character] [Missing=*/+"; ,%]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-]		
Literal question	State		
Frequency table not shown (44 Modalities)			

### #3 V3: Population 2006

Information	[Type= continuous] [Format=numeric] [Range= 219304-43214013] [Missing=*]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=2946409.977 /-] [StdDev=6766168.33 /-]		
Recoding and Derivation	Population 2006		

### #4 V4: Total estimated water demand

Information	[Type= continuous] [Format=numeric] [Range= 13158.2-3094491] [Missing=*]		
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=210988.048 /-] [StdDev=487040.533 /-]		
Recoding and Derivation	Total Estimated Water Demand		

### #5 V5: Installed capacity (m3/d)

Information	[Type= continuous] [Format=numeric] [Range= 6197-3556376] [Missing=*]		
Statistics [NW/ W]	[Valid=39 /-] [Invalid=5 /-] [Mean=273567.372 /-] [StdDev=607807.256 /-]		
Recoding and Derivation	Installed Capacity (m3/d)		

## File Water supply sanitation- urban (cont.)

## #6 V6: Current output (m3/d)

Information	[Type= continuous] [Format=numeric] [Range= 646.8-1761823.7] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=120124.343 /-] [StdDev=289097.904 /-]
Recoding and Derivation	Current Output (m3/d)

## #7 V7: % access to water

Information	[Type= continuous] [Format=numeric] [Range= 7.9-91.48] [Missing=*]
Statistics [NW/ W]	[Valid=37 /-] [Invalid=7 /-] [Mean=61.145 /-] [StdDev=22.053 /-]
Recoding and Derivation	% Access to Water

## #8 V8: Population access to water

Information	[Type= continuous] [Format=numeric] [Range= 97452.895-26432165.2295] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=1802193.084 /-] [StdDev=4190952.291 /-]
Recoding and Derivation	Population Access to Water

## #9 V9: % access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 10.5-99.1] [Missing=*]
Statistics [NW/ W]	[Valid=37 /-] [Invalid=7 /-] [Mean=72.339 /-] [StdDev=24.107 /-]
Recoding and Derivation	% Access to Sanitation

## #10 V10: Population access to sanitation

Information	[Type= continuous] [Format=numeric] [Range= 62546.55-32042597.2005] [Missing=*]
Statistics [NW/ W]	[Valid=44 /-] [Invalid=0 /-] [Mean=2184722.536 /-] [StdDev=5036960.493 /-]
Recoding and Derivation	Population Access to Sanitation

## File Related Disease by state

## #1 V1: Zonal Group

Information	[Type= discrete] [Format=character] [Missing=*/—, %]
Statistics [NW/ W]	[Valid=38 /-] [Invalid=0 /-]
Recoding and Derivation	Zonal Group

## File Related Disease by state (cont.)

## #1 V1: Zonal Group (cont.)

Value	Label	Cases	Percentage
NATIONAL	NATIONAL	1	2.6%
North Central	North Central	7	18.4%
North East	North East	6	15.8%
North West	North West	7	18.4%
South East	South East	5	13.2%
South South	South South	6	15.8%
South West	South West	6	15.8%

Warning: these figures indicate the number of cases found in the data file. They cannot be interpreted as summary statistics of the population of interest.

## #2 V2: State

Information	[Type= discrete] [Format=character] [Missing=* /—, %]
Statistics [NW/ W]	[Valid=38 /-] [Invalid=0 /-]
Literal question	State
Frequency table not shown (38 Modalities)	

## #3 V3: Diarrhoea

Information	[Type= continuous] [Format=numeric] [Range= 712-650640] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=43376 /-] [StdDev=118692.627 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Diarrhea1. ....Yes or No

## #4 V4: G/ Worm

Information	[Type= continuous] [Format=numeric] [Range= 0-10689] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=712.6 /-] [StdDev=1961.54 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Guinea worm.....Yes or No

## #5 V5: Dysentery

Information	[Type= continuous] [Format=numeric] [Range= 967-300696] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=20046.4 /-] [StdDev=55051.223 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Dysentery.....Yes or No

## File Related Disease by state (cont.)

## #6 V6: Typhoid Fever

Information	[Type= continuous] [Format=numeric] [Range= 1130-342555] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=22837 /-] [StdDev=61849.826 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Typhoid Fever.....Yes or No

## #7 V7: Malaria

Information	[Type= continuous] [Format=numeric] [Range= 1482-2912533] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=194168.867 /-] [StdDev=524499.747 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Malaria.....Yes or No

## #8 V8: Schistosomiasis

Information	[Type= continuous] [Format=numeric] [Range= 0-30419] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=2027.933 /-] [StdDev=5571.187 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Schistosomiasis.....Yes or No

## #9 V9: Blood In Urine

Information	[Type= continuous] [Format=numeric] [Range= 0-2389] [Missing=*]
Statistics [NW/ W]	[Valid=38 /-] [Invalid=0 /-] [Mean=125.737 /-] [StdDev=540.617 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Blood In Urine.....Yes or No

## #10 V10: Scabies

Information	[Type= continuous] [Format=numeric] [Range= 0-62246] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=4149.733 /-] [StdDev=11438.378 /-]
Literal question	Scabies.....Yes or No

## #11 V11: R/ Worm

Information	[Type= continuous] [Format=numeric] [Range= 135-42453] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=2830.2 /-] [StdDev=7657.708 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Ring worm.....Yes or No



## File Related Disease by state (cont.)

## #12 V12: Cholera

Information	[Type= continuous] [Format=numeric] [Range= 60-57505] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=3833.667 /-] [StdDev=10515.443 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Cholera.....Yes or No

## #13 V13: Trachoma

Information	[Type= continuous] [Format=numeric] [Range= 0-18736] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=1249.067 /-] [StdDev=3579.209 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Trachoma.....Yes or No

## #14 V14: Hepatitis/B

Information	[Type= continuous] [Format=numeric] [Range= 0-41716] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=2781.067 /-] [StdDev=7675.119 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Hepatitis B.....Yes or No

## #15 V15: Streptococci

Information	[Type= continuous] [Format=numeric] [Range= 0-23026] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=1535.067 /-] [StdDev=4265.528 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Streptococci.....Yes or No

## #16 V16: Onchocerciasis

Information	[Type= continuous] [Format=numeric] [Range= 0-31463] [Missing=*]
Statistics [NW/ W]	[Valid=30 /-] [Invalid=8 /-] [Mean=2097.533 /-] [StdDev=5832.942 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Literal question	Onchocerciasis.....Yes or No

## #17 V17: Other

Information	[Type= continuous] [Format=numeric] [Range= 0-19692] [Missing=*]
Statistics [NW/ W]	[Valid=28 /-] [Invalid=10 /-] [Mean=1406.571 /-] [StdDev=3742.112 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?

**File Related Disease by state** (cont.)

**#17 V17: Other** (cont.)

Literal question	Other water related diseases (specify) .....Yes or No
------------------	---

**#18 V18: Total**

Information	[Type= continuous] [Format=numeric] [Range= 0-4546758] [Missing=*]
Statistics [NW/ W]	[Valid=38 /-] [Invalid=0 /-] [Mean=239303.053 /-] [StdDev=734955.381 /-]
Pre-question	Did any member of the household suffered from any of the following diseases in 2005?
Recoding and Derivation	Total

# Documentation

<a href="#">Questionnaires.....</a>	23
<a href="#">Water Supply Facility Questionnaire-FORM-01.....</a>	23
<a href="#">Water Supply Agency Operational Questionnaire-FORM-02.....</a>	23
<a href="#">Sanitation Facility Questionnaire-FORM-03.....</a>	24
<a href="#">Water Related Diseases-FORM-04.....</a>	24
<a href="#">Household Survey Questionnaire-FORM-05.....</a>	24
<a href="#">References.....</a>	25
<a href="#">Water supply Manual.....</a>	25
<a href="#">Study Documentation.....</a>	25

## Questionnaires

Water Supply Facility Questionnaire-FORM-01, FMWR-FORM-01, Federal Ministry of Water Resources(FMWR), October 2009, Nigeria [nga], English [eng], "Water Resource questionnaire FORM-01.pdf"

### Description

The water supply facility(Form-01) questionnaire used to collect the data

### Abstract

To capture the location, attributes and operation status of water supply facilities.  
This will cut across rural, small town and urban schemes

### Table of Contents

Population coverage  
Capacity of the scheme  
Source of Raw Water  
Type of Treatment  
Connections  
Total length of piped network  
Average number of hours of water supply per day

Water Supply Agency Operational Questionnaire-FORM-02, FMWR-FORM-02, Federal Ministry of Water Resources(FMWR), October 2009, Nigeria [nga], English [eng], "Water Resource questionnaire FORM-02.pdf"

### Description

The water supply agency operational(Form-02) questionnaire used to collect the data

### Abstract

To give the profile of the Agency in terms of assets, capacity utilization, manpower, resource capital involvement and asset maintenance, key consumable and financial sustainability

### Table of Contents

Performance Data/Indicator  
Total No of Schemes  
Total capacity of all schemes  
Source Connections  
Total annual cost of operations and maintenance in 2005  
Total Energy Consumption (2005)  
Total water sales (total billing)  
Total revenue collection  
Total number of employees  
Total Capital Expenditure for water supply Infrastructural Development (1999 - 2006)  
Major constraints

Sanitation Facility Questionnaire-FORM-03, FMWR-FORM-03, Federal Ministry of Water Resources(FMWR), October 2009, Nigeria [nga], English [eng], "Water Resource questionnaire FORM-03.pdf"

Description

The Sanitation Facility Survey (Form-03) questionnaire used to collect the data

Abstract

Form 03 (Sanitation Facility Survey): To capture the location, types and conditions of sanitation facilities  
To capture the location, types and condition of sanitation facilities. This will cut across rural, small town and urban areas.

Table of Contents

Type of Facility  
Latrines  
Public Water Closets  
Sewerage system  
Who maintains the facility?

Water Related Diseases-FORM-04, FMWR-FORM-04, Federal Ministry of Water Resources(FMWR), October 2009, Nigeria [nga], English [eng], "Water Resource questionnaire FORM-04.pdf"

Description

The water related diseases (Form-04) questionnaire used to collect the data

Abstract

Form 04 (Water Related Diseases Survey): To collect data on reported cases of water related diseases from health institutions  
To capture the location, attributes and operation status of water supply facilities. This will cut across rural, small town and urban schemes  
To capture the incidence of reported cases of diseases that are caused by lack of access to safe water, contaminated water, poor sanitation and exposure to water based disease vectors. This will cut across rural areas, small towns and urban areas

Table of Contents

Type of Health Institution  
Primary Health Centre  
Comprehensive Health Centre  
General Hospital  
Teaching Hospital  
Private Clinic/Hospital  
How many cases of the following diseases were reported in your health institution in 2005?  
Diseases  
Federal Medical Center  
Specialist Hospital  
Military Reference Hospital

Household Survey Questionnaire-FORM-05, FMWR-FORM-05, Federal Ministry of Water Resources(FMWR), October 2009, Nigeria [nga], English [eng], "Water Resource questionnaire FORM-05.pdf"

Description

The household survey(Form-05)questionnaire used to collect the data

Abstract

Form 05 (Household Survey): To capture data on the proportion of households that have access to safe drinking water and sanitation facilities and prevalence of water related diseases in each community

Table of Contents

PART A- WATER SUPPLY  
What is your family's main source of drinking water  
Who is responsible for the provision of the main source of drinking water?  
How far is the water source/point from your home  
State the number and sex of children and adult members of your household who fetch water for the family  
How many times does each of them collect water everyday

How many liters of water does your family use in a day  
 How many people live in the house  
 What is the average cost of water used per day  
**PART B-SANITATION FACILITIES**  
 Which of the following Toilet Facilities does your household use  
 What is/are the distance(s) of the facility/facilities available to you if not in-house  
 Are/is the facilities/ facility adequate for you  
 If you use a communal latrine, how many people share it  
 Is the latrine currently in use?  
 Are there any problems with the facility  
**PART C - WATER RELATED DISEASES**  
 Did any member of the household suffered from any of the following diseases in 2005

## References

Water supply Manual, FMWR-Manual, Fedral Ministry of Water Resources(FMWR), October 2009, Nigeria [nga], English [eng], "Water Resource Instruction Manual.pdf"

### Description

The manual guide for the survey

### Abstract

The main objective of this assignment is to document the proportion of Nigerians that have access to safe water and sanitation facilities and those who otherwise, do not have according to the following definitions:

- i. Access to Water Supply: The availability of at least 20litres per person per day of improved water supply from a source within 250 metres of user's dwelling.
- ii. Access to Sanitation: Sanitation can be defined as the availability of improved disposal facilities of human wastes that can effectively prevent human, animal and insect contact with the human wastes.
- iii. Improved Water Supply: The following technologies are included in the assessment as representing improved water supply: a) Household Connections, b) Public standpipes, Borehole, Protected dug Well, Protected Spring, and Rainwater harvesting.
- iv. Not- Improved Water Supply: The following technologies are considered "not improved": a) Unprotected well, b) Unprotected spring, Vendor-provided water, c) Bottled water, Tanker truck-provided water, d) streams and ponds.
- v. Improved Sanitation: The following technologies are considered "improved", a) Connection to a public sewer, b) Connection to septic system, c) Pour-flush latrine, d) Simple pit latrine\* e) Sanplat\*, f) Ventilated improved pit latrine.
- vi. Not-Improved Sanitation: The following technologies are considered "not improved": a) Service or bucket latrines (where excreta are manually removed), b) Latrines with an open pit, c) defecation in bushes.

### Table of Contents

INTRODUCTION  
 SAMPLING STRATEGY  
 SELECTION OF LOCATION AND HOUSEHOLDS  
 Multi community ward  
 Multi ward community  
 DATA COLLECTION  
 SOFTWARE  
 DETERMINATION OF ACCESS TO SAFE WATER SUPPLY AND  
 SANITATION AND PREVALANCE OF WATER RELATED DISEASES  
 Water Related Diseases

Study Documentation, National Water Supply And Sanitation Metadata Toolkit documententation, NBS ICT Documentation and Archiving team, October 2009, Nigeria [nga], English [eng], "Water Resource StudyDoc.pdf"

### Description

