

Knowledge, Attitudes and Practices on WASH in Federal Capital Territory

A Report of A Survey Conducted by UNICEF Zone C



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Knowledge, Attitudes and Practices on WASH in FCT

Executive Summary

The antecedents of Water, Sanitation and Hygiene (WASH) programme delivery have shown that attention has been on service provision, with little emphasis on the processes and systems required to go along with the delivery. It is in recognition of this, that the 2008 Knowledge, Attitude and Practice (KAP) survey was designed and organized in order to set up a system of collecting data at community level for planning of WASH intervention.

The survey in FCT was preceded by a training of the fieldworkers in the use of the Qualitative and Quantitative instruments for the exercise. The training and actual survey were facilitated and supervised by FCT WASH Consultant, FCT RUWASSA PME, HOD Community Mobilization, Water Supply Officer and the State (FCT) Resource Person. The survey in FCT covered 10 randomly selected IYS communities in 2 International Year Sanitation (IYS) Area Councils (LGAs) (selected among 6 LGAs): Bwari and Kuje. The survey lasted for two weeks.

The overall approach for the survey was based on a framework developed through a collaborative process involving relevant stakeholders with support from a consultant. The framework involves training of field officers and collection of qualitative and quantitative data from respondents in the selected communities. A qualitative and quantitative field survey was employed. The qualitative survey involved the use of in-depth interview, focus group discussion (FGD), observation checklist and community mapping / diagnosis while the quantitative survey involved the use of structured questionnaire. A total of 854 questionnaires were administered in the quantitative study. The general restriction of adult males from entering into households due to religious faith is less practiced in FCT due to mixed religious affiliations (relatively more Christians) and was not a major constraint unlike in other Zone C communities.

Results from the survey showed that majority of them (44.6%) are indigenes living in the communities for more than 10 years or always, had some level of schooling (64.1%), Primary education (33.5%), secondary education (18.2%) and Qu'ranic education (3.0%) The major occupation is farming (59.1%, self employed (11.3%) and civil service (5.2%).

Water scarcity was ranked as a major problem (87.5%) confronting the communities followed by roads (79.5%) and toilets (46.1%). Diseases of great concern next to malaria are typhoid (41.9%) and diarrhea/dysentery (47.7%) which is similar in both the Areas.

The prominent channels of communication in the communities are: 73.7% mentioned radio, town announcer, 36.3%, churches and mosques, 30.2% and traditional rulers 30.0%. In Kuje, use of radio was the highest (79.5%). Other sources of information is also obtained from schools (12.9%) and clinics (7.9%) particularly in Bwari. The existing institutional structures and social groups in the selected Area Councils / LGAs are Churches and mosques (66.2%), Farmers' Groups (44.5%), Traditional Council (41.4%), and others. CDAs played very low role (4.3%). The major felt needs in the communities are non-availability of water (87.5%), good roads (79.5%), health centre (59.3%), electricity (53.3%) and toilets (46.1%)

These problems are common to all the LGAs and water is more serious in Kuje. Same problems have reflected in households also.

Across the 2 LGAs, surface waters (70.0%), rain water (40.8%), hand pump boreholes (24.8%) were the most used sources. The sources of drinking water were provided mostly by Donor agencies (58.4%), communities (8.1%) and LGA (5.2%). Bwari obtained more support from LGA.

About 42.2% of the respondents confirmed that they get their water within 30 minutes and 33.3% take up to 1 hour. A majority (67.4%) of the respondents use up to 200 litres. Adult women (58.4%), school girls (37.2%), and young women (34.9%) share the responsibility of fetching water. When school aged children are sent, it was gathered that they go very early in the morning so as not to lose time for school. On certain occasions (27.1%) when the major water supply breaks down, the same alternate sources are used.

About only 34.5% of the respondents claimed to have treated their water supply. The most common methods were chlorination (12.9%), sedimentation (12.5%) and boiling (10.1%). The facilities used for storing drinking water are clay pots with cover (52.8%), plastic covered containers (32.4%) and open container (20.1%). Open containers were more in Kuje (24.7%).

Items used in fetching drinking water from the storage facility include cup with handle (67.9%), calabash (18.7%) and bowl (6.5%). These items are kept on the storage container (66.8%), kept in a basket or shelf (18.1%), or hung on wall (9.9%). Only 6.5% leave on the floor.

Cleaning of the storage facilities is done daily by 62.8%, weekly by 17.6% and when dirty by 1.8%. Some 17.8% never cleaned. The degree and frequency of cleaning was good in Bwari. When respondents were asked about the qualities of safe drinking water, there were responses such as visually clear (72.0%), sweet taste (37.7%), odourless (25.3%), and free from germs (29.2%). The water supply system failed on occasions as responded by 35.8% but they were able to rehabilitate within a week to one month. Repairing of damaged water point is done by Area mechanic (6.0%) and the community members seem to be unaware (78.1%).

Open defecation (79.2%) and the use of traditional pit latrines (29.6%) are common practices in the 2 LGAs. Kuje reported the highest open defecation rate (84.3%) and Bwari reported the largest number of traditional pit latrines (66.2%). The communities use these facilities because they are cheap (21.9%) and easy to maintain (8.8%), and cannot afford to build a better one (32.8%).

Among those practicing open defecation, 83.7% are willing to stop and start using traditional pit latrine (39.3%), improved pit toilets (13.6%), Pour flush (12.3%), VIP toilets (7.3%) and others. However, about 50.7% of them are willing to pay for their preferred method of excreta disposal. Those who are not willing to stop open defecation cited lack of money (98.0%).

It was common for under-5 children to defecate around the house (41.3%), in the potty/chamber pot (20.6%). Defecation around the house is most common in both the Areas. The use of potty/chamber pot is more frequent in Bwari (33.8%) and those who used toilet

were also high up to 7.4%. They believed that the concept of communal toilets is good and they should be provided by Donor agencies (98.5%) Regarding their maintenance, communities (98.5%) should be responsible. No taboos on use of toilets are identified (78.8%). Use by parents-in-law and men and women were accepted. Some 88.7% reported that children's faeces is also harmful.

The respondents used soap for washing clothes (88.9%), taking bath (88.9%), bathing children (64.1%) and washing hands after defecation (19.6%). The respondents believed that hands should be washed before meal (92.1%), after meal (83.7%), after defecation (55.9%) and after cleaning children's faeces (15.2%). Items used for hand washing include water only 39.5%, water and soap 32.9%, and others such as ash and sand are insignificant.

A good number understood personal hygiene to mean bathing (87.2%), washing of clothes (65.7%), cutting of hair (47.8%), and cutting of nails (43.4%). The knowledge was relatively higher in Bwari. Sweeping of the house (95.9%), cleaning of kitchen (45.4%), cleaning of toilets (30.9%) proper disposal of waste water (30.2%), and proper disposal of solid waste (16.8%) regularly are practices referred to as household and environmental hygiene. This understanding of household/environmental hygiene is fairly higher in Bwari. The respondents clean their compounds, once daily (92.1%), every other day (3.0%), and only when dirty (4.1%).

Taking refuse to the open dumping (52.8%), dump sites (47.1%) are the most common methods practiced for household waste disposal. Burning is practiced by 11.3%. With respect to animal waste, majority (45.0%) take to the dump sites while 38.0% dump openly. Taking to farm is very low (19.7%).

Presence of stagnant water around water points was reported only by 16.9%. In order to prevent water stagnation, 15.4% said that they would clear it, while 1.0% said they would divert to farms. There was however a consensus that those community members (97.2%) should be responsible for prevention of stagnant water.

There were reports of epidemics of water related diseases within the last one year by 42.3% of all respondents. Malaria, diarrhea, dysentery were prominent among all reported diseases. Diarrhoea was more in children under 5 among boys more than girls. Dysentery was equally more irrespective of age. Incidence of cholera and scabies were noticed, though to a less extent. Generally, the prevalence of other infections was low among the communities.

The results of the spot checks indicated the following: There was presence of faeces around the houses (14.4%), inside the house (9.6%) and near the water source (3.6%). Both the Areas under the study showed similar trends. Water sources were kept fairly free from the faeces. Cow dung and animal excreta (12.2%) and children's faeces (19.2%) were seen around the premises. Traditional pit toilets (86.7%) were the most observed. The observed features of the toilets are as follows: hole small enough (3.6%), adequate privacy (7.0%), floor safe (6.7%), presence of slab (4.6%), and has superstructure (4.6%). Locations of the toilets were mostly outside the compound. In terms of the indicators for the current usage of the toilet, the following results were obtained: clear paths leading to (13.8%), cleanliness (7.9%), free of smell (6.4%), and free of flies (5.8%). Hand wash facilities were located inside the house (3.6%) or within walking distance (3.3%) and next to the toilet (2.6%).

Water storage containers were found among 27.2% and separate bowl/cup to fetch water were found among 14.2%.

The schools under study indicated that they several problems. Inadequate staff, class rooms and limited exposure to hygiene education, Water supply and toilet facilities are grossly inadequate and unsafe. Gender balance is visible. There is evidence of reasonably increased girl education in the schools.

Some recommendations were made with a view to further improving the data collection and to assist the communities to meet the Millennium Development Goals.

1.0 Introduction to KAP Baseline Survey

In Nigeria there is dearth of data on the status of water, sanitation and hygiene among communities. It is increasingly becoming difficult to plan any meaningful programme to improve their health and well-being. The KAP survey is in line with the global call for improved water supplies, sanitation and hygiene practices among communities particularly in low income rural areas

The 2003 Nigerian Demographic and Health Survey (NDHS) estimated access to safe water at 40 per cent while access to improved sanitation was reported at 66 per cent. The 2003 NDHS also reported access to hand washing facilities, which includes water, soap and basin, at 43 per cent. Recent data from the 2006 National Core Welfare Indicators Questionnaire Survey suggest an improved rural water coverage of 51 per cent and rural sanitation coverage of five per cent. The 2006 UNICEF/WHO Joint Monitoring Programme (JMP) report, however, suggested a decline in the trend of access to improved water supply from 33 per cent to 31 per cent between 1990 and 2004 and a slight trend increase in access to improved sanitation from 33 per cent to 36 per cent the same period. Experts and policy makers point to three broad categories of initiatives to ease the shortage of clean safe water, especially in the world's poorest regions. These include; sanitation, purification of water and water management. "Based on the 2006 UNICEF/WHO Joint Monitoring Programme report on sanitation in Nigeria, there is a slight increase in the access to sanitation in the country between 1990 and 2004. However, over 70 million people are still without basic sanitation and with present trend it might be difficult to achieve the Millennium Development Goals particularly the sanitation target.

UNICEF experience in the past indicated that improving excreta disposal can decrease diarrhoea rates by 35 per cent and hand washing with soap at critical times can decrease diarrhea by over 47 per cent. Such improvements save children's lives and improve the quality of their living environment. In addition to lowering the rates of diarrhoea, improved excreta disposal and hand washing will have significant impact on reducing parasitic infections, worm infestations and trachoma. Most recent findings also indicate that hand washing with soap may also have a significant effect on the reduction of Acute Respiratory Infections (ARI) which account for as much as 40 per cent.

UNICEF in Nigeria engaged the services of a Consultant and State facilitators to conduct KAP Baseline surveys (pilot study) in UNICEF zone C which has 9 States. This is done with a view to carrying out follow-up KAP surveys to measure progress against baselines and monitor/evaluate impact of programme interventions. In 2007, the UNICEF Field offices had started to take the initiative and engage consultants to develop KAP surveys. However at the Abuja Head Office it was seen to be necessary to collect and assess comparable KAP results across states and the four UNICEF Zones. Early in 2008, various KAP surveys used over the years were harmonized into one KAP survey. During this period, a national Sub-committee was established to develop a National questionnaire and Management Information System (MIS) for the sector. The harmonized KAP was submitted and reviewed by committee members, including Federal Ministry of Agriculture and Water Resources (FMAWR), NBS, WaterAid, Ministry of Health and UNICEF. The questionnaire was also sent to WASH consultants in the EU and DFID supported States for their inputs. These inputs were necessary in order to develop a standardized format which can yield data with high level of accuracy, reliability and precision.

In order to build sustainability into the system, the following strategies were adopted to obtain baseline data:

The UNICEF Consultant trained the LGA WASH Unit/Dept. staff to facilitate KAP baseline (once) and probably progress (annual) surveys.

Results of the surveys are entered into 'Epidata' and analyzed.

The final report with all the findings shall be submitted by the Consultant to the PM of the State, and copy to UNICEF.

In the KAP survey, in order to gain a baseline for UNICEF, EU and DFID supported LGAs and the identified International Year of Sanitation (IYS) LGAs, selected communities were sampled using appropriate statistical tools.

2.0 Background to FCT

2.1 Geography/Location and Land Mass

FCT is located in the central region of Nigeria, approximately between longitudes 6^o 46'E and 7^o 37'E and latitudes 8^o 21'N and 9^o 18'N. It is bounded by Nasarawa state to the east, Kaduna state to the north, Niger State to the west and Kogi State to the south. The territory was created in 1978, following the decision to relocate the Nation's capital away from Lagos. The factors considered for the location of the new capital were justified by the Federal Government in Decree No 6 of 1976. The territory covers an Aerial extent of about 8000 Sq km.

2.2 Brief Description of the Communities

The communities selected for the survey are Igu and Kuchibiyu in Bwari Area Council. These 2 Communities are UNICEF-focus Communities while Tukpechi and Dafara Communities in Kuje Area Council, which are non Focus Communities. The Communities are rural and agrarian in nature.

Table 1. Area Councils and the population distribution in FCT

Area Council	Population	Male	Female
Bwari	227216	116266	110950
AMAC	778567	422133	356434
Gwagwalada	157770	80795	76978
Abaji	58444	28652	29792
Kwali	85837	48918	48449
Kuje	97367	43725	53642
Total	1405201	740489	676245



Fig. 1 Map of Federal Capital Territory

2.3 Water and sanitation and Institutional Arrangement

Access to safe water coverage: 64.1%
 Access to Adequate Sanitation: 58.6%

The FCT Water Board is the government agency responsible for the provision and management and management of all water resources in the FCT. Other Agencies involved in the provision and management of rural water supply schemes include the FCT UNICEF-Assisted Water and Sanitation Project, Area Councils, FCT UBEB, FCT MDGs Project. Currently, 390 solar-powered rural water supply schemes are being constructed through MDG funding and about 80% of these are sited in primary schools.

2.4 Constraints, Challenges and Way Forward

- (i) Language barrier- The facilitator had challenges communicating with the natives in their language, which is Gbagyi, as most of the natives could not speak English. Their understanding of the common language (Hausa) in the area of is very low.
- (ii) Accessibility – Accessing Igu Community was very difficult as the road leading to the community is in a deplorable state.
- (iii) Willingness to grant information –It took serious persuasion on the part of facilitators to convince the people that the exercise was not for Tax purposes despite having met with the traditional and opinion leaders of the community.
- (iv) One of the great strength during the exercise was the co-operation of the Traditional rulers and opinion leaders who were able to convince their subject that the exercise was not for tax purposes.
- (v) Mobilization of youth coppers (NYSC) to participate as facilitators in the baseline survey greatly improved t he quality and time of completion of the exercise.

The opportunities include:

- Cooperation's of the Traditional chief and Village Heads
- The willingness of the enumerators to adhere to instructions from the coordinators.
- Ability to speak the local dialect.

3.0 Methodology

The survey in FCT was preceded by a training of the fieldworkers in the use of the instruments for the exercise. The training and actual survey were facilitated and supervised by FCT WASH Consultant, FCT RUWASSA PME, HOD Community Mobilization, Water Supply Officer and the State Resource Person. A profound gratitude goes to the Programme Manager and Executive Director FCT RUWASSA for providing necessary logistic supports for the success of the survey. The survey comprises qualitative (using FGDs and In-depth interviews) and quantitative (using a structured interviewer administered questionnaire) components. The first section of this report is dedicated to the qualitative while the second section highlights the findings from the quantitative survey.

The overall approach for the survey was based on a framework developed through a collaborative process involving relevant stakeholders with support from a consultant. The framework involves training of field officers and collection of qualitative and quantitative data from respondents in the selected communities.

A quantitative and qualitative field survey was employed. The quantitative survey involved the use of structured questionnaire, while the qualitative survey involved the use of in-depth interview, focus group discussion (FGD), observation checklist and community mapping / diagnosis.

3.1. Data collection

This involved the collection of both qualitative and quantitative information from respondents in the selected communities. This involved the use of structured questionnaires. A total of 854 questionnaires were administered and retrieved.

3.2. Sample Size and Survey Procedure

Scientific steps were followed to ensure the technical appropriateness of the survey sample size and sampling procedure. The steps taken took cognizance of practical issues bordering on survey logistics. The following formula was used to determine the sample size.

$$n = \frac{D^* \cdot Z_{1-\alpha/2}^2 p (1-p) N}{d^2 (N-1) + Z_{1-\alpha/2}^2 p (1-p)}$$

Where:

- n = sample size estimate
- D = design effect
- P = proportion practicing hand washing as a hygiene practice
- $Z_{1-\alpha/2}$ = standard score corresponding to 95% confidence level
- N = total population
- d = degree of precision

Using hand washing as a proxy for the indicators, p was chosen to be 50% (the value that will yield the largest sample size). The design effect was estimated at 2 because of the clustering in the target population, and the level of precision set at 0.05. The total population of FCT

State was obtained from the official gazette of the Federal Republic of Nigeria for the 2006 population census and used as N. After the application of the above formula, the estimate obtained for Kogi State was adjusted for a non-response rate of 10%.

A three stage sampling procedure was adopted for selection of respondents. In FCT, the IYS Area Councils/LGAs were 4 (Table 2). The first stage was a random selection of 40% of the IYS LGAs in each of the state LGAs. Table 2 shows sample sizes and number of selected IYS LGA for the state. The NPC populations of the selected LGAs were obtained from the 2006 census. The proportion of the total population of the selected LGAs constituted by each LGA was computed. Sample sizes for each LGA were then proportionately allocated to the selected communities.

The second stage involves the random selection of 40% of the IYS communities in each of the selected LGA. The sample sizes allocated to each LGA was then equally allocated to the selected communities. Table 3 shows the breakdown of sample sizes for the state, selected LGAs and communities. The last stage was the random selection of street blocks (as clusters) based on the map of the selected community. Household Heads were systematically selected and interviewed in selected clusters. The communities surveyed in the selected Area Councils / LGAs are given in Table 2.

Table 2. Sample size and number of selected IYS LGAs in FCT

Area Council / LGA	Area Council/ LGA Population	% LGA Population	Sample/ LGA	No of IYS communities	Sampled IYS communities	Samples per community
Bwari	227216	70	598	5	2	99
Kuje	97367	30	256	5	2	28
	324583					

3.3 Initial Training of Field Officers

Adequate preparation for the survey is critical to its success. In view of this, a one-day pre-training meeting was held involving all the Resource Persons/Facilitators and other relevant stakeholders.

The meeting was followed by a 3-day training of relevant officers on the art of conducting the survey. It was aimed at providing a general overview of the survey instruments and equipping the officers with the requisite skills required for the conduct of the survey. The training was conducted for selected officers from the 9 states in UNICEF Zone C Field office and 3 Focus LGAs of Zamfara State.

(A) Structure of training

The training was designed with each day having three (3) sessions of two hours each and structured to include the use of participatory tools, lectures, power point presentations and field work. The field work included role plays and pre-testing of tools to be used in the survey for data collection. The training programme is attached as Appendix I.

(B) Participants and Resource Persons

Participants for the training were drawn from Federal Ministry of Agriculture and Water Resources (FMA&WR), States RUWATSAN, Zamfara LGAs WASH Units, and Kaduna Polytechnic. The Resource Persons/Facilitators for the training were selected from University of Ibadan, National Water Resources Institute (NWRI), Kaduna and WaterAid. The list is presented in Appendix.

(C) Pre-data Collection Meeting

As part of the preparation for data collection, two meetings were held on the 11th and 12th April, 2008, with all the facilitators in attendance to agree on strategy and modality for the conduct of the survey in each community. This include agreeing on date for the survey in each community, sending information to the selected communities, photocopying and purchasing materials for the survey and making logistics arrangements.

3.4 Data Collection

This step focused on collecting both qualitative and quantitative information from respondents in the selected communities.

4.0 Qualitative Survey

Qualitative surveys involving focus group discussions (FGDs) with community development associations (CDA) were conducted in different groups (men and women) in the communities. There were also in-depth interviews with the Village WASHCOM Chairperson and school heads. The study was conducted in the LGAs shown in Table 2. The pre-data collection training conducted at FCT.

4.1 Bwari Area Council

4.1.1. KII with the Head of School

The school has staff strength of 14 (6 male and 8 female), no support staff, number of class rooms 6, and number of pupils 334 (male 143 and female 191). Source of water is a borehole for dry and wet seasons, had 6 storage pots and 6 hand wash facilities. It takes 3 – 5 mins to fetch water and pupils are assigned with the responsibility. No toilets (except a pit toilet) and urinals for staff and pupils. No girl counseling facility. Staff and pupils visit pit toilet and also practice open defecation. Hygiene promotion is fair and Health personnel visit the school regularly.

School needs a total sanitation package with water supply, toilets, urinals and dustbins. He expects the Government to provide and the school would be able to manage. Poverty/lack of funds is a constraint. Some voluntary contributions may be possible.

4.1.2. FGD with Community Head

For the community, the main sources of water are borehole, hand dug wells and rain in wet season. It takes 3-5 mins in wet season and up to 1 hour in dry season to fetch. Packaged water is also used for drinking needs. Women and children fetch water.

Pit latrines and open defecation are practiced. About 50% of the respondents have toilet in their homes. No taboos attached to usage. The preferred toilets are WC and VIP types. They are ready to contribute some funds if initiated. Once built, they believe that community will be able to manage.

Other needs in the community are water and electricity. Malaria has been a problem disease and no control measure are put in place.

4.2. Kuje Area Council

4.2.1. KII with the Head of School

The school has staff strength of 16 (4 male and 12 female), no support staff, number of class rooms 6, and number of pupils 804 (male 393 and female 411). Source of water is a dug well for dry and wet seasons, depends on rain in wet season, had 2 storage pots and 6 hand wash facilities. It takes 5 – 30 mins to fetch water and pupils are assigned with the responsibility. A pit toilet exist and no urinals for staff and pupils. No girl counseling facility. Staff and pupils visit pit toilet and also practice open defecation. Hygiene promotion is good and Health personnel visit the school regularly.

School needs a total sanitation package with water supply, toilets, urinals and dustbins. He expects the Government to provide and the school would be able to manage. Poverty/lack of funds is a constraint. Some voluntary contributions may be possible.

4.2.2. FGD with Community Head

For the community, the main sources of water are tap, spring, hand dug wells and rain in wet season. It takes 9-15 mins in wet season and up to 2 hours in dry season to fetch. Packaged water is also used for drinking needs. Tanker supply is also patronized. Women and children fetch water.

Pit latrines and open defecation are practiced. About 30% of the respondents have toilet in their homes. No taboos attached to usage. The preferred toilets are VIP type. They are ready to contribute some funds if initiated. Once built, they believe that community will be able to manage.

Pressing needs in the community are water and toilets. Malaria has been a problem disease and no control measure are put in place.

5.0 Quantitative Survey

5.1. Background Characteristics

There were a total of 854 household Heads interviewed across the selected communities from the 2 selected Area Councils/LGAs. The number was distributed across the LGAs as follows: Bwari – 598 (70.0%) and Kuje – 256 (30.0%). Majority of the respondents were males (69.3%). Table 3 shows the background characteristics of the survey respondents. About 56.7% of the respondents are living in small town and 43.2% in rural. About 44.6% of them have been living in their houses always since the creation of FCT. Some 44.5% were aged 30 – 50 years while about 81.1% were married. Some 64.1% reported that they have been to school. However, 3.0% of them had Qu'ranic education, 33.5% primary schooling, and 18.2% secondary schooling. The community is a mixed ethnic group with Hausa 14.7% , Igbos 4.2%, Yorubas 2.0% and others 79.2%. Christianity is the commonest religion with 66.8%. In terms of occupation, farming (59.1%) followed by self employed (11.8%) and civil service (15.8%).

Table 3. Characteristics of the communities in FCT

Variabl	Bwari	Kuje	Total
Gender			
Male	60.5	72.9	69.3
Female	39.5	27.1	30.7
Community			
Urban	0.0	0.2	0.1
Small town	0.0	79.6	56.7
Rural	100.0	20.2	43.2
Time living in the household			
Less than 1 year	0.9	1.2	1.1
1 – 10 years	24.7	32.6	30.3
Above 10 years	38.1	18.3	23.9
Always	36.4	47.9	44.6
Age			
Below 30 years	19.9	24.8	23.4
30 – 50 years	39.8	46.4	44.5
Above 50 years	6.1	13.4	11.3
Don't know	34.2	15.3	20.7
Marital status			
Single	12.1	17.6	16.0
Married	85.3	79.5	81.1
Divorced	0.4	1.2	1.0
Widowed	2.2	1.7	1.8
Ever attended school			
Yes	72.3	6.9	64.1
No	27.7	39.1	35.9
Highest school attended			
Qu'ranic school	5.6	1.9	3.0
Basic literacy	1.3	2.8	2.3
Primary school	38.1	31.7	33.5
Vocational school	1.7	1.0	1.2
Secondary school	20.8	17.2	18.2
Post secondary school	4.8	8.8	7.6
Not stated	27.7	36.6	34.0
Ethnic group			
Hausa	29.4	8.8	14.7
Igbo	1.3	5.3	4.2
Yoruba	0.0	2.8	2.0
Others	69.3	83.1	79.2
Religion			
Christianity	49.8	73.6	66.8
Islam	46.8	19.3	27.1
Others	3.4	7.1	6.1

Occupation			
Unemployed	3.0	8.6	7.0
Student	5.6	2.4	3.3
Housewife	2.2	4.0	3.5
Retired/pensioner	4.8	1.2	2.2
Farmer	64.1	57.1	59.1
Private employment	3.0	5.3	4.7
Self employed	10.8	12.2	11.8
Civil servant	3.9	5.7	5.2
Professional	2.6	3.4	3.2
others	-	-	-

5.2. Information Dissemination and Institutions, and Perceived Problems in the Communities

Tables 4 to 6 provide the information dissemination channels and institutional structure, major problems and childhood diseases in the communities. Overall, 73.7% mentioned radio, town announcer, 36.3%, churches and mosques, 30.2% and traditional rulers 30.0%. In Kuje, use of radio was the highest (79.5%). Other sources of information is also obtained from schools (12.9%) and clinics (7.9%) particularly in Bwari..

The existing institutional structures and social groups in the selected Area Councils / LGAs are Churches and mosques (66.2%), Farmers' Groups (44.5%), Traditional Council (41.4%), and others. CDAs played very low role (4.3%).

Table 5 shows the major perceived problems in the communities and households. Across all the LGAs, the common problems in the communities are non-availability of water (87.5%), good roads (79.5%), health centre (59.3%), electricity (53.3%) and toilets (46.1%) These problems are common to all the LGAs and water is more serious in Kuje. Same problems have reflected in households also.

The common WASH diseases (Table 6) are malaria (98.3%), typhoid (41.9%), and diarrhea/dysentery (47.7%). These are all prevalent in both the LGAs. Diseases of great concern are typhoid and diarrhea.

Table 4. Channels of information dissemination and institutional structure

Variable	Bwari	Kuje	Total
Channels of information dissemination			
Radio	59.3	79.5	73.7
Newspapers	8.2	15.9	13.7
Television	5.6	13.4	11.2
Town announcer	32.9	24.0	36.3
Churches/Mosques	36.8	27.6	30.2
Posters	9.5	1.9	4.1
Schools	18.2	10.9	12.9
Clinics	25.5	0.9	7.9
Traditional ruler	38.8	27.2	30.0
Others	2.2	2.2	2.2
Institution structures and social groups			
Traditional council	57.6	35.0	41.4
CDA	10.8	1.7	4.3
Churches/Mosques	82.3	59.8	66.2
Cooperative societies	20.8	8.6	12.1
Youth organizations	45.0	13.1	22.2
Women societies	45.0	17.6	25.4
Farmers' group	40.3	46.2	44.5
Others	1.7	3.3	2.8

Table 5. Major perceived problems in the community and households

Variable	Bwari	Kuje	Total
Major Problems in community			
Water availability	64.5	96.7	87.5
Safe water	58.0	68.8	65.7
Good roads	97.4	72.4	79.5
Electricity	82.7	41.6	53.3
Schools	34.6	44.1	41.4
Health centre	26.8	72.2	59.3
Fertilizer	58.9	38.4	44.3
Hunger/poverty	41.1	50.9	48.1
Household toilet	45.0	46.6	46.1
Community/public toilet	19.0	12.8	14.5
Others	0.4	0.9	0.7
Major Problems in household			
Water availability	55.0	87.4	78.2
Safe water	54.5	67.6	63.9
Good roads	67.1	48.1	53.5
Electricity	74.9	34.1	45.7
Schools	19.5	29.5	26.6
Health centre	22.9	55.3	46.1
Fertilizer	46.3	27.2	32.7
Hunger/poverty	42.0	47.6	46.0
Household toilet	45.9	41.6	42.8
Community/public toilet	15.6	13.3	13.9

Vector infestation	15.2	1.7	5.5
Others	0.4	0.2	0.2

Table 6. Major problems of diseases perceived in communities and households

Variable	Bwari	Kuje	Total
Common diseases in community			
Malaria	98.3	98.3	98.3
Measles	59.7	50.7	53.3
Diarrhea/dysentery	54.1	42.4	47.7
Cholera	13.4	30.2	25.4
Yellow fever	8.2	15.7	13.6
Chicken pox	21.2	14.8	16.6
Meningitis	7.4	9.7	9.0
Typhoid	44.6	40.9	41.9
Guinea worm	0.9	5.7	4.3
Oncocerciasis	0.0	10.5	7.5
Trachoma	0.0	2.9	2.1
Schistosomiasis	0.9	1.6	1.4
Worm infestations	16.0	5.0	8.1
Scabies	13.4	4.3	6.9
others	0.0	0.5	0.4
Major childhood diseases in community			
Malaria	96.5	95.2	95.6
Measles	71.0	55.0	59.6
Diarrhea/dysentery	53.2	31.9	38.0
Cholera	13.0	23.4	20.5
Yellow fever	6.1	13.8	11.6
Chicken pox	24.2	14.7	17.4
Meningitis	4.8	6.0	5.7
Typhoid	27.3	37.2	34.4
Guinea worm	1.7	2.8	2.5
Oncocerciasis	0.0	4.5	3.2
Trachoma	0.0	0.7	0.5
Schistosomiasis	0.9	0.2	0.4
Worm infestations	17.7	2.8	7.0
Scabies	14.3	4.1	7.0
Others	0.9	0.2	0.4

5.3. Water Supply

Water is a basic necessity to human life and safe drinking water is a prerequisite for healthy living. Therefore, this section gives the highlights of the sources of water for drinking and other domestic purposes; providers of these water sources and persons responsible for fetching water in the households.

5.3.1. Source of Water for Drinking and Other Domestic Purposes

Across the 2 LGAs, surface waters (70.0%), rain water (40.8%), hand pump boreholes (24.8%) were the most used sources. It is interesting that a majority depends on rain during rainy season which needs to be addressed for sustainability in the communities in the long

run. During dry season, surface waters accounted for 63.3%, followed by hand pump boreholes, protected hand dug wells and other sources. The sources of water for other domestic purposes were also the same (Table 7).

Table 7. Source of water for drinking and other domestic purposes

Variable	Bwari	Kuje	Total
Sources of water for households			
Piped water into apartment	0.9	0.2	0.4
Piped water into compound	0.9	4.7	3.6
Public standpipe	2.2	2.8	2.6
Motorised borehole	0.4	8.3	6.0
Hand pump borehole	78.4	3.4	24.8
Protected dug well with hand pump	5.6	0.3	1.8
Protected hand dug well	1.7	22.2	16.4
Unprotected hand dug well	1.7	10.0	7.6
Developed spring	1.7	0.0	0.5
Undeveloped spring	0.9	0.2	0.4
Rain water harvesting	30.7	44.8	40.8
Bottled water	-	-	-
Sachet (pure) water	0.0	5.2	3.7
Tanker water vendor	0.0	1.7	1.2
Truck Water vendors	0.9	2.9	2.3
Surface water (river/pond/lake/)	75.8	67.8	70.0
Others	0.4	3.1	2.3
Main source of drinking water during dry season			
Piped water into apartment	0.0	0.2	0.1
Piped water into compound	0.0	4.8	3.5
Public standpipe	0.9	2.4	2.0
Motorised borehole	0.9	9.0	6.7
Hand pump borehole	78.4	2.8	24.3
Protected dug well with hand pump	5.6	0.2	1.7
Protected hand dug well	0.9	16.7	12.2
Unprotected hand dug well	1.3	6.4	4.9
Developed spring	1.3	0.0	0.4
Undeveloped spring	1.3	0.3	0.6
Rain water harvesting	7.8	15.7	13.4
Bottled water	-	-	-
Sachet (pure) water	0.0	3.4	2.5
Tanker water vendor	0.0	1.2	0.9
Truck Water vendors	2.6	1.6	1.8
Surface water (river/pond/lake/)	63.2	63.3	63.3
Others	0.0	2.8	2.0
Main source of drinking water during wet season			

Piped water into apartment	0.0	0.2	0.1
Piped water into compound	0.4	4.3	3.2
Public standpipe	1.3	2.2	2.0
Motorised borehole	0.9	8.1	6.0
Hand pump borehole	74.0	1.2	21.9
Protected dug well with hand pump	5.2	0.7	2.0
Protected hand dug well	0.0	14.5	10.4
Unprotected hand dug well	0.4	3.6	2.7
Developed spring	1.3	0.0	0.4
Undeveloped spring	0.4	0.3	0.4
Rain water harvesting	33.8	60.5	52.9
Bottled water	0.0	0.7	0.5
Sachet (pure) water	0.0	6.0	4.3
Tanker water vendor	0.0	1.2	0.9
Truck Water vendors	0.4	1.0	0.9
Surface water (river/pond/lake/)	59.7	52.1	54.3
Others	0.0	4.0	2.8
Main source of water for other domestic purposes			
Piped water into apartment	-	-	-
Piped water into compound	0.0	4.3	3.1
Public standpipe	1.3	2.8	2.3
Motorised borehole	0.4	7.8	5.7
Hand pump borehole	78.8	2.8	24.4
Protected dug well with hand pump	5.6	0.3	1.8
Protected hand dug well	1.3	18.3	13.4
Unprotected hand dug well	0.4	6.7	4.9
Developed spring	1.3	0.0	0.4
Undeveloped spring	1.3	0.2	0.5
Rain water harvesting	26.8	42.1	37.7
Tanker water vendor	0.0	1.0	0.7
Truck Water vendors	0.4	1.2	1.0
Surface water (river/pond/lake/)	69.7	63.6	65.4
Others	0.4	2.9	2.2

5.3.2 Provider of Water Source and Responsibility for Water Fetching

The sources of drinking water were provided (Table 8) mostly by Donor agencies (58.4%), communities (8.1%) and LGA (5.2%). Bwari obtained more support from LGA. About 42.2% of the respondents confirmed that they get their water within 30 minutes and 33.3% take up to 1 hour. A majority (67.4%) of the respondents use up to 200 litres.

Adult women (58.4%), school girls (37.2%), and young women (34.9%) share the responsibility of fetching water. When school aged children are sent, it was gathered that they go very early in the morning so as not to lose time for school. On certain occasions (27.1%) when the major water supply breaks down, the same alternate sources are used (Table 9).

Table 8. Providers of water sources, distance and time taken to fetch water

Variable	Bwari	Kuje	Total
Provider of main source of drinking water			
Federal Government	5.2	0.0	1.5
State Government	0.9	0.3	0.5
Local government	12.6	2.2	5.2
Donor agencies	58.4	58.4	58.4
Community	2.6	10.3	8.1
Religious bodies	0.4	0.3	0.4
Private (multilateral organizations)	11.7	4.8	6.8
Private supply for a fee	1.3	4.8	3.8
Others	6.9	18.6	15.3
How long does it take you to walk there, fetch water, and return			
Less than 30 mins	45.0	41.0	42.2
30-60mins	29.0	35.0	33.3
Above 1 hour	5.6	3.6	4.2
Within premises	3.0	1.4	1.8
I don't know	17.3	19.0	18.5
What quantity of water does your household use per day			
<=200 litres	59.3	70.7	67.4
201-1000 litres	26.4	16.2	19.1
> 1000 litres	-	-	-
Don't know	14.3	13.1	13.4

Table 9. Person responsible for fetching water

Person responsible for fetching water for household	Bwari	Kuje	Total
School girl (6-14)	47.6	33.1	37.2
School boy (6-14)	26.4	27.4	27.1
Young lady (15 -18 years)	36.8	34.1	34.9
Young man (15 -18)	16.5	27.8	24.5
Adult woman (18 years or older)	72.3	52.9	58.4
Adult man (18 years or older)	10.8	16.4	14.8
Water delivered by vendors	0.0	0.3	0.2
Others	0.4	1.4	1.1

5.3.3 Water Treatment for Safe Drinking

About only 34.5% of the respondents claimed to have treated their water supply. The most common methods were chlorination (12.9%), sedimentation (12.5%) and boiling (10.1%). About 11.0 to 13.0% treated water in the previous one or two days. Respondents answering do not remember stood at 67.9% thereby confirming that water treatment is not practiced (Table 10).

Table 10. Water treatment practices and the methods being used

Water Treatment	Bwari	Kuje	Total
Water treatment for safe drinking			
Yes	33.3	35.0	34.5
No	64.9	55.3	58.1
Never	1.8	9.1	7.0
Don't know	0.0	0.5	0.4
Water treatment options			
Sedimentation only	19.0	9.8	12.5
Sedimentation and Filtration	1.7	2.4	2.2
Filtration through cloth	6.1	5.9	5.9
Boiling	3.5	12.8	10.1
Chlorination	10.8	13.8	12.9
Ceramic/Sand Filtration	1.7	0.3	0.7
Solar disinfection	0.4	0.0	0.1
Others	1.3	0.3	0.6
Last time of water treatment			
Today	9.5	14.3	12.9
Yesterday	6.1	13.1	11.1
Less than one week	3.9	8.8	7.4
Less than a month	0.4	0.5	0.5
More than a month	1.7	0.9	1.1
Don't remember	78.4	62.4	67.9

5.3.4 Storage of Household Drinking Water and Knowledge of Qualities of Safe Drinking Water

The facilities used for storing drinking water (Table 11) are clay pots with cover (52.8%), plastic covered containers (32.4%) and open container (20.1%). Open containers were more in Kuje (24.7%).

Items used in fetching drinking water from the storage facility include cup with handle (67.9%), calabash (18.7%) and bowl (6.5%). These items are kept on the storage container (66.8%), kept in a basket or shelf (18.1%), or hung on wall (9.9%). Only 6.5% leave on the floor.

Cleaning of the storage facilities is done daily by 62.8%, weekly by 17.6% and when dirty by 1.8%. Some 17.8% never cleaned. The degree and frequency of cleaning was good in Bwari.

When respondents were asked about the qualities of safe drinking water, there were responses such as visually clear (72.0%), sweet taste (37.7%), odourless (25.3%), and free from germs (29.2%).

Table 11. Storage of household drinking water and knowledge of qualities of safe drinking water

Water Treatment	Bwari	Kuje	Total
Type of drinking water storage facility in use			
Open container	8.7	24.7	20.1
Plastic covered container	19.5	37.6	32.4
Clay pots with cover	71.9	45.2	52.8
Clay pots without cover	7.4	8.6	8.3
Iron bucket containers without cover	1.7	5.5	4.4
Plastic buckets with tap	5.6	1.6	2.7
Basins without cover	1.7	2.9	2.6
Others	0.4	5.0	3.7
Item used in fetching drinking water from storage facility			
Cup with handle	82.3	62.2	67.9
Cup without handle	3.9	7.9	6.8
Calabash	11.3	21.7	18.7
Bowl	2.6	8.1	6.5
Place where item for fetching drinking water is kept			
On the storage container	69.7	65.7	66.8
In a basket/shelve	22.5	16.2	18.1
On the floor	3.0	6.2	5.3
Hanging	4.8	11.9	9.9
Others	-	-	-
Frequency of cleaning of storage container			
Daily	83.1	54.7	62.8
Weekly	11.7	20.0	17.6
Monthly	1.3	2.1	1.8
When dirty	3.9	29.3	17.8
Never	-	-	-

5.3.5. Development and Maintenance of Community Water Source

A very high proportion of respondents in the selected LGAs expressed willingness to develop a community water source (80.1%). They are however reluctant to pay water tariff (90.5%). The attitudes of the respondents to the development and maintenance of community water sources are shown in Table 12. The water supply system failed on occasions as responded by 35.8% but they were able to rehabilitate within a week to one month. Repairing of damaged water point is done by Area mechanic (6.0%) and the community members seem to be unaware (78.1%).

Table 12. Development and maintenance of community water source

Water Treatment	Bwari	Kuje	Total
Qualities of safe drinking water			
Visually clear	83.1	67.6	72.0
Sweet taste	22.9	43.6	37.7
Odourless	31.2	22.9	25.3
Salty	18.6	1.6	6.4
Free from germs	12.1	36.0	29.2
If animals can drink	2.6	1.7	2.0
Others	0.0	0.2	0.1
Willingness to develop a community water source			
Yes	79.7	80.3	80.1
No	20.3	19.7	19.9
Willingness to pay water tariff			
Yes	5.2	11.2	9.5
No	94.8	88.8	90.5
Breakdown of safe water point in last one year			
Yes	52.4	29.2	35.8
No	32.5	47.2	43.0
Don't know	15.1	23.6	21.2
Repair of damaged water point			
Within a week	5.6	10.9	9.4
Up to a month	6.9	5.9	6.2
More than 1 month	32.5	3.6	11.8
Others	55.0	79.7	72.6
Person who carries out repairs			
Area mechanic	8.7	5.0	6.0
Trained WASHCOM member	10.8	0.5	3.5
Pump caretaker members	10.0	2.9	4.9
Artisan/staff of LGA's WASH	0.4	0.5	0.5
Others	0.4	0.9	0.7
Don't know	69.7	90.2	84.3
Payment for repairs by community			
Yes	26.8	2.1	9.1
No	9.6	14.1	12.8
Don't know	63.6	83.8	78.1

5.4 .Excreta Disposal, Preferences and Affordability

5.4.1 Excreta Disposal Practices

Open defecation (79.2%) and the use of traditional pit latrines (29.6%) are common practices in the 2 LGAs (Table 13). Kuje reported the highest open defecation rate (84.3%) and Bwari reported the largest number of traditional pit latrines (66.2%). The communities use these

facilities because they are cheap (21.9%) and easy to maintain (8.8%), and cannot afford to build a better one (32.8%).

Among those practicing open defecation, 83.7% are willing to stop and start using traditional pit latrine (39.3%), improved pit toilets (13.6%), Pour flush (12.3%), VIP toilets (7.3%) and others. However, about 50.7% of them are willing to pay for their preferred method of excreta disposal. Those who are not willing to stop open defecation cited lack of money (98.0%) (Table 13).

In the communities, it was common for under-5 children to defecate around the house (41.3%), in the potty/chamber pot (20.6%). Defecation around the house is most common in both the Areas. The use of potty/chamber pot is more frequent in Bwari (33.8%) and those who used toilet were also high up to 7.4% (Table 14).

Table 13. Excreta disposal practices

Variable	Bwari	Kuje	Total
Types of excretal disposal facilities in community			
Open defecation	66.2	84.3	79.2
Dig, defecate and bury in soil	14.7	32.8	27.6
Traditional pit toilet	46.8	22.8	29.6
Improved pit toilets	2.6	1.2	1.6
VIP toilets	5.2	0.0	1.5
Pour flush toilets	0.9	0.0	0.2
Water closet toilets	0.4	0.3	0.4
Others	4.8	4.1	4.3
Types of excretal disposal facilities in households			
Open defecation	41.6	77.2	67.1
Dig, defecate and bury in soil	0.4	9.7	7.0
Traditional pit toilet	35.1	14.8	20.6
Improved pit toilets	2.6	0.9	1.4
VIP toilets	4.8	0.0	1.4
Pour flush toilets	1.7	0.5	0.9
Water closet toilets	0.9	0.5	0.6
Others	6.1	2.8	3.7
Reason for choice of toilet facility			
Cheap	29.0	19.1	21.9
Easy to maintain	13.9	6.7	8.8
Cannot afford to build a better one	25.5	35.3	32.6
Others	0.9	3.6	2.8
Willingness to stop open defecation			
Yes	67.1	90.3	83.7
No	32.9	9.7	16.3
Preferred option (other than open defecation)			

Dig, defecate and bury in soil	3.9	4.0	3.9
Traditional pit toilet	41.1	38.6	39.3
Improved pit toilets	9.5	15.2	13.6
VIP toilets	7.4	7.2	7.3
Pour flush toilets	20.8	9.0	12.3
Others	16.9	24.7	22.4
Willingness to pay for preferred option			
Yes	58.9	47.4	50.7
No	41.1	52.6	52.6

Table 14. Disposal of children's faeces

Method	Bwari	Kuje	Total
Under-5 defecation			
Around the house	41.1	41.4	41.3
In the potty/chamber pot	33.8	15.3	20.6
In the toilet	7.4	1.4	3.1
In pampers	0.0	0.5	0.4
In his/her cloth	0.9	0.7	0.7
Within the compound	2.2	9.8	7.6
Others	14.7	30.9	26.3
Methods of disposal of children faeces			
Dropped into a toilet facility	39.0	9.1	17.6
Eaten by dogs	8.7	20.7	17.3
Buried in the soil	8.2	13.1	11.7
Thrown into the bush	43.7	64.1	58.3
Disposed with solid waste	3.0	2.4	2.6
Do nothing/left it there	0.9	1.0	1.0

5.4.2. Provision and Maintenance of Communal Toilets

Excreta disposal is perceived as a problem in the study area by 88.8%. A majority of them (96.9%) did not see any communal toilets (Table 15). They believed that the concept of communal toilets is good and they should be provided by Donor agencies (98.5%) Regarding their maintenance, communities (98.5%) should be responsible.

Table 15. Provision and maintenance of communal toilets

Method	Bwari	Kuje	Total
Problem of excretal disposal in community			
Yes	85.3	90.2	88.8
No	14.7	9.8	11.2
Availability of public/communal toilets			
Yes	7.8	1.2	3.1
No	92.2	98.8	96.9
Provider of public/communal toilets			
Federal govt	0.4	0.0	0.1
State Government	0.9	0.0	0.2

Local govt	1.7	0.0	0.5
Donor agencies	94.8	100.0	98.5
Community	2.2	0.0	0.6
Religious bodies	-	-	-
Others	-	-	-
Maintainance of public/communal toilets			
Federal Government	1.3	0.0	0.4
State govt	0.4	0.0	0.1
Donor agencies	3.0	0.0	0.9
Community	95.2	99.8	98.5
Private fee	0.0	0.1	0.1
Others	-	-	-

5.4.3. Perception of a Good Toilet, Type and Preferred Ownership

The information on how the respondents perceive a good toilet, the type of toilet and preferred ownership is given in Table 16. In terms of perception, the respondents are of the opinion that privacy (60.9%), safety (49.2%), and disease prevention (33.8%).

Most (64.7%) of the respondents preferred private toilet, some preferred compound toilet (23.1%) and very few opted for communal toilets (12.2%).

Flush toilet (50.7%), Traditional pit toilets (37.54%) and VIP (11.5%) are the most preferred types in the selected LGAs. However, only 24.3% could afford the preferred toilet type and only 63.4% are willing to contribute towards the preferred toilet.

No taboos on use of toilets are identified (78.8%). Use by parents-in-law and men and women were accepted. Some 88.7% reported that children's faeces is also harmful.

Table 16. Perception of a good toilet, type and preferred ownership

Toilet	Bwari	Kuje	Total
Perception of a good toilet			
Privacy	71.4	56.7	60.9
Safety	59.7	45.0	49.2
Prevents Diseases	56.7	24.7	33.8
Easy To Use	20.3	14.1	15.9
It Is Well Covered And Clean	11.7	26.0	21.9
Children Can Use On Their Own	4.8	9.3	8.0
Built Close To The House	1.7	10.2	7.8
Others	0.4	0.3	0.4
Type of toilet ownership preferred			
Communal	1.3	16.6	12.2
Private	86.1	56.2	64.7
Compound	12.6	27.2	23.1
Type of toilet preferred			
Flush	59.3	47.2	50.7
Traditional pit	25.5	42.2	37.5
VIP	14.7	10.2	11.5
SanPlat	-	-	-
Others	0.4	0.3	0.4
Affordability of preferred toilet type			

Yes	28.6	22.6	24.3
No	71.4	77.4	75.7
Willingness to pay for improvement of household toilet			
Yes	65.8	62.4	63.4
No	34.2	37.6	36.6
Existence of taboos on use of toilet in household			
Yes	2.2	3.1	2.8
No	74.0	80.7	78.8
Sharing of toilet by men and women			
Yes	93.1	93.6	93.5
No	6.9	6.4	6.5
Sharing of toilet by women and parents-in-law			
Yes	91.3	93.8	93.1
No	8.7	6.2	6.9
Views about exposed excretal of children			
Harmful	96.5	85.5	88.7
Harmless	3.5	10.0	8.1
Don't know	0.0	4.5	3.2

5.5 Personal, Household and Environmental Hygiene

5.5.1 Personal Hygiene

The respondents used soap for washing clothes (88.9%), taking bath (88.9%), bathing children (64.1%) and washing hands after defecation (19.6%) (Table 17). When asked about when is it important to wash hands, there was a consensus among the respondents that hands should be washed before meal (92.1%), after meal (83.7%), after defecation (55.9%) and after cleaning children faeces (15.2%). After defecation, hand washing is practiced in all the LGAs. Items used for hand washing include water only 39.5%, water and soap 32.9%, and others such as ash and sand are insignificant.

A good number understood personal hygiene (Table 18) to mean bathing (87.2%), washing of clothes (65.7%), cutting of hair (47.8%), and cutting of nails (43.4%). The knowledge was relatively higher in Bwari.

5.5.2. Household and Environmental Hygiene

Sweeping of the house (95.9%), cleaning of kitchen (45.4%), cleaning of toilets (30.9%) proper disposal of waste water (30.2%), and proper disposal of solid waste (16.8%) regularly are practices referred to as household and environmental hygiene by the respondents. This understanding of household/environmental hygiene is fairly higher in Bwari (Table 18). When asked how often respondents clean their compounds, once daily (92.1%), every other day (3.0%), and only when dirty (4.1%).

Taking refuse to the open dumping (52.8%), dump sites (47.1%) are the most common methods practiced for household waste disposal. Burning is practiced by 11.3%. With respect

to animal waste, majority (45.0%) take to the dump sites while 38.0% dump openly. Taking to farm is very low (19.7%) (Table 18).

Presence of stagnant water around water points was reported only by 16.9%. In order to prevent water stagnation, 15.4% said they would clear it, while 1.0% said they would divert to farms. There was however a consensus that those community members (97.2%) should be responsible for prevention of stagnated water.

Table 17. Personal hygiene

Variable	Bwari	Kuje	Total
Uses of soap			
Washed clothes	91.8	87.8	88.9
Took my bath	92.6	87.4	88.9
Bathed my children	71.4	61.2	64.1
Washed child's bottom	39.8	12.4	20.2
Washed my children's hands	29.4	3.1	10.6
Washed my hands after defecating	34.2	13.8	19.6
Washed hands after cleaning child	23.8	2.8	8.8
Washed hands before feeding child	22.9	6.6	11.2
Washed hands before preparing food	24.7	14.3	17.3
Washed hands before eating	26.8	20.3	22.2
Others	0.4	0.7	0.6
Important time to wash hands			
Before Meal	97.0	90.2	92.1
After Meal	87.4	82.2	83.7
After Defecation	64.1	52.6	55.9
After Cleaning The Children faeces	37.2	6.4	15.2
Others	6.5	4.0	4.7
Immediate practice after defecation			
Clean up	52.4	51.0	51.4
Go my way	2.6	2.2	2.3
Wash hands	45.0	46.7	46.2
Items for hand washing			
Water Only	22.5	46.2	39.5
Water With Soap	37.2	31.2	32.9
Water With Ashes	3.9	0.9	1.7
Sand And Water	1.3	1.2	1.2
Others	-	-	-
Immediate practice after cleaning up children faeces			
Wash hands	92.2	97.9	96.3
Go my way	7.8	2.1	3.7
Items for hand washing after cleaning up children faeces			
Water only	35.9	55.7	50.1
Water with soap	55.8	36.0	41.7
Water With Ashes	4.3	1.2	2.1

Sand And Water	2.6	1.2	1.6
Others	0.4	0.2	0.2

Table 18. Household and environmental hygiene

Variable	Bwari	Kuje	Total
Washing of household toilets			
On daily basis	61.9	53.8	56.1
Every other day	12.6	5.2	7.3
Weekly	6.9	2.4	3.7
Once a month	0.9	0.2	0.4
Only when it looks dirty	17.3	37.8	31.9
Others	0.4	0.7	0.6
Understanding of personal hygiene			
Bathing	97.0	83.3	87.2
Cutting of Hair	58.9	43.4	47.8
Cutting of Nails	54.1	39.1	43.4
Washing clothes	74.0	62.4	65.7
Others	10.8	12.9	12.3
Understanding of household hygiene			
Sweeping the house regularly	97.0	95.5	95.9
Cleaning the kitchen	60.6	39.3	45.4
Proper disposal of waste water	53.2	21.0	30.2
Cleaning of toilet regularly	55.0	21.4	30.9
Proper disposal of solid waste	35.1	9.5	16.8
Cleaning of compound /environment			
Once daily	78.8	81.7	80.9
Every other day	12.6	5.9	7.8
Weekly	0.9	1.0	1.0
Monthly	0.4	4.5	3.3
Only when weedy or dirty	6.9	6.9	6.9
Disposal of household refuse			
Dump site	58.9	42.4	47.1
Gutter	1.3	1.4	1.4
Garbage pit	2.2	2.4	2.3
Burning	4.3	14.1	11.3
Open dumping	46.3	55.3	52.8
Others	0.0	6.4	4.6
Disposal of animal wastes			
Dump site	46.8	44.3	45.0
Gutter	-	-	-
Garbage pit	0.4	1.4	1.1
Burning	0.9	11.9	8.8
Open dumping	23.4	43.8	38.0
Taking to farms	19.5	19.8	19.7

Others	0.0	2.1	1.5
Presence of stagnant water around water point			
Yes	19.0	16.0	16.9
No	81.0	84.0	83.1
Prevention of stagnant water			
Clear it	26.4	11.0	15.4
Soak away Pit	1.7	0.0	0.5
Divert to farm	-	-	-
Grow crops around water source	1.7	0.7	1.0
Others	1.7	0.0	0.5
Responsibility for prevention of stagnant water			
Community members	93.5	98.6	97.2
WASHCOM members	4.3	0.3	1.5
LGA	-	-	-
Others	2.2	1.1	1.4

5.6. Water Related Diseases

There were reports of epidemics of water related diseases within the last one year by 42.3% of all respondents (Table 19). Malaria, diarrhea, dysentery were prominent among all reported diseases. Diarrhoea was more in children under 5 among boys more than girls. Dysentery was equally more irrespective of age. Incidence of cholera and scabies were noticed, though to a less extent. Generally, the prevalence of other infections was low among the communities.

Table 19. Water related diseases

Variable		Bwari		Kuje		Total	
Epidemic of water related diseases in the last one year							
Yes		24.7		49.3		42.3	
No		35.9		15.2		21.1	
Don't know		39.4		35.5		36.6	
Disease	Children <5 Boys	Children <5 Girls	Children 5-14 Boys	Children 5-14 Girls	Adult Male	Adult Female	
1. Diarrhoea	14.5	11.8	5.4	2.6	2.2	2.2	
2. Guinea worm	2.0	0.9	0.4	-	-	-	
3. Dysentery	8.4	5.1	2.1	2.5	3.1	2.7	
4. Malaria	18.6	12.9	5.8	6.4	14.9	13.8	
5. Scabies	1.1	0.5	-	0.1	0.9	0.1	
6. Cholera	1.6	0.7	0.6	0.2	1.2	1.1	

7. Trachoma	0.5	-	-	-	0.6	-
8. Ring worm	0.6	0.4	0.6	1.2	0.6	0.1
9. Hepatitis A	0.1	0.1	0.1	-	0.2	0.1
10. Polio	1.0	2.1	0.5	0.1	0.1	-
11. Onchocerciasis	0.1	-	0.2	0.7	0.9	0.1
12. Worm Infestations	1.5	1.2	0.6	0.2	0.1	0.4

6.0 Structured (Spot Check) Observations

The results of the spot checks are summarized in Table 20. There was presence of faeces around the houses (14.4%), inside the house (9.6%) and near the water source (3.6%). Both the Areas under the study showed similar trends. Water sources were kept fairly free from the faeces.

Cow dung and animal excreta (12.2%) and children's faeces (19.2%) were seen around the premises. Traditional pit toilets (86.7%) were the most observed. The observed features of the toilets are as follows: hole small enough (3.6%), adequate privacy (7.0%), floor safe (6.7%), presence of slab (4.6%), and has superstructure (4.6%). Locations of the toilets were mostly outside the compound. In terms of the indicators for the current usage of the toilet, the following results were obtained: clear paths leading to (13.8%), cleanliness (7.9%), free of smell (6.4%), and free of flies (5.8%). Hand wash facilities were located inside the house (3.6%) or within walking distance (3.3%) and next to the toilet (2.6%). Water storage containers were found among 27.2% and separate bowl/cup to fetch water were found among 14.2%.

Table 20. Structured observations

Variable	Bwari	Kuje	Total
Evidence of faeces around the premises			
Inside the House	7.4	10.5	9.6
Outside/Around the house	13.9	14.7	14.4
Near the water Source	0.9	4.7	3.6
Observations on the feces around the premises			
Infants/young children's faeces	16.5	20.3	19.2
Adults' faeces	1.3	7.8	5.9
Cow dung and other animal faeces	5.2	15.0	12.2
Type of toilet observed			
Dig, defecate and bury in soil	3.0	10.3	8.3
Traditional pit toilet	89.6	85.5	86.7
Improved pit toilets	1.7	0.3	0.7
VIP toilets	2.6	0.0	0.7
Pour flush toilets	2.2	0.3	0.9
Water closet toilets	0.4	2.2	1.7

Features of the toilet in the household, (if available)			
Has superstructure	10.0	2.4	4.6
Floor safe	18.2	2.1	6.7
Has a slab	11.7	1.7	4.6
Hole small enough	18.6	3.6	3.6
Adequate privacy	16.5	3.3	7.0
Toilet in current use			
Path leading to it clear	26.0	9.0	13.8
Is it clean	22.1	2.2	7.9
Reasonably free of smell	17.3	2.1	6.4
Reasonably free of flies	16.0	1.7	5.8
Cleansing materials	9.1	0.5	3.0
Is there water in vicinity	5.2	1.2	2.3
Is there ash in vicinity	1.7	0.5	0.9
Any other evidence of use	2.6	0.5	1.1
Presence of hand washing facility			
Next to the toilet	6.5	1.0	2.6
Within walking distance	6.1	2.2	3.3
Inside the house	8.7	1.6	3.6
Observe the presence of the following			
Storage container	22.9	29.7	27.2
Separate bowl/cup to fetch water	14.7	14.0	14.2

7.0 Main Findings and Conclusions

- i. The study dealt with socio-economic status, demographic features, level of knowledge and perception on water, and hygiene and sanitation practices of the study population, including level of support from government, donor agencies and community participation to improve water, sanitation and hygiene among the people of FCT obtained from 2 Area Councils/LGAs (from a total of 6), viz Bwari and Kuje. A total 854 Questionnaires were distributed.
- ii. A majority of the participants in all the FGD and KII conducted are farmers, married and a mixture of Muslims and Christians. Most of the respondents are males and majority of them have primary and secondary education. A majority of the respondents (44.6%) are indigenes and have been living in the communities for more than 10 years. The major mode of communication and information dissemination is through radio, town announcer, and Churches and Mosques. Farmers' Groups, Traditional Council, women societies and youth organizations are found in the communities.
- iii. Surface waters (70.0%), rain water (40.8%), hand pump boreholes (24.8%) were the most used sources. The sources of drinking water were provided mostly by Donor agencies (58.4%), communities (8.1%) and LGA (5.2%).
- iv. About 42.2% of the respondents confirmed that they get their water within 30 minutes and 33.3% take up to 1 hour. A majority (67.4%) of the respondents use up to 200 litres. Adult women (58.4%), school girls (37.2%), and young women (34.9%) share the responsibility of fetching water. When school aged children are sent, it was gathered that they go very early in the morning so as not to lose time for school. On

certain occasions (27.1%) when the major water supply breaks down, the same alternate sources are used.

About only 34.5% of the respondents claimed to have treated their water supply. The most common methods were chlorination (12.9%), sedimentation (12.5%) and boiling (10.1%). The facilities used for storing drinking water are clay pots with cover (52.8%), plastic covered containers (32.4%) and open container (20.1%). Open containers were more in Kuje (24.7%).

- v. Open defecation (79.2%) and the use of traditional pit latrines (29.6%) are common practices in the 2 LGAs. Kuje reported the highest open defecation rate (84.3%) and Bwari reported the largest number of traditional pit latrines (66.2%). The communities use these facilities because they are cheap (21.9%) and easy to maintain (8.8%), and cannot afford to build a better one (32.8%). Among those practicing open defecation, 83.7% are willing to stop and start using traditional pit latrine (39.3%), improved pit toilets (13.6%), Pour flush (12.3%), VIP toilets (7.3%) and others. However, about 50.7% of them are willing to pay for their preferred method of excreta disposal. Those who are not willing to stop open defecation cited lack of money (98.0%).
- vi. The schools under study indicated that they several problems. Inadequate staff, class rooms and limited exposure to hygiene education, Water supply and toilet facilities are grossly inadequate and unsafe. Gender balance is visible. There is evidence of reasonably increased girl education in the schools.
- vii. A good number understood personal hygiene to mean bathing (87.2%), washing of clothes (65.7%), cutting of hair (47.8%), and cutting of nails (43.4%). The knowledge was relatively higher in Bwari. Sweeping of the house (95.9%), cleaning of kitchen (45.4%), cleaning of toilets (30.9%) proper disposal of waste water (30.2%), and proper disposal of solid waste (16.8%) regularly are practices referred to as household and environmental hygiene. This understanding of household/environmental hygiene is fairly higher in Bwari. The respondents clean their compounds, once daily (92.1%), every other day (3.0%), and only when dirty (4.1%).
- viii. Taking refuse to the open dumping (52.8%), dump sites (47.1%) are the most common methods practiced for household waste disposal. Burning is practiced by 11.3%. With respect to animal waste, majority (45.0%) take to the dump sites while 38.0% dump openly. Taking to farm is very low (19.7%).
- ix. Stagnant water is found in some communities and communities take responsibility of clearing the drains.
- x. All the study areas are faced with the same WASH challenges such as lack of water supply, poor management of existing WASH facilities, lack of excreta disposal facilities, lack of health centres and skilled healthcare givers etc. All the problems have been identified as causes of prevalence of various communicable diseases such as water borne or water-sanitation related diseases.
- xi. There were reports of epidemics of water related diseases within the last one year by 42.3% of all respondents. Diarrhoea and dysentery in various age groups, malaria and measles seem to be prominent on the list. Generally, the disease prevalence was low among the communities.

8.0 Recommendations

Based on these findings, the following recommendations are made to minimize diseases and improve health and socio-economic status of the people.

- **Health Education:** (a) Mass education of the community members in the form of public enlightenments, (b) Involvement of opinion leaders in health training and workshops, (c) Incorporation of health education in schools curriculum to address WASH issues, (d) Increase girls' enrolment in schools and establishment of adult classes for the women in purdah in order to improve their knowledge on health and home management.
- **Financial Empowerment and poverty eradication:** Provision of farm input, improved marketing of farm produce through construction of access roads leading to the consumers and industries as well as access to agricultural loans by the farmers will go a long way in improving their economic status thereby motivating them to contribute financially towards their households and community development through self help programmes.
- **Provision of more appropriate WASH facilities and training on how to manage them:** The technology of facilities that should be provided must be appropriate for the environment and religious/cultural beliefs to ensure maximum utilization of the facilities. Improved pit latrines, separate toilets for both sexes, and solar powered boreholes with storage tanks and water outlets of potable water at all seasons are some of the examples which can be sustained.
- **Mobilization for community participation in all WASH programmes.** In order to actualize the millennium development goals (MDGS) as stated earlier in this report, community intervention must involve community members so that any project sited in these communities might give adequate monitoring and sustenance. Environmental sanitations and personal hygiene in the community should involve all members of the community to ensure a collective effort.
- **Recruitment of skilled personnel to manage key positions in the communities:** Part of the issues raised by the community members was inadequacy of skilled health care givers and teachers.
- **Political Commitment:** The findings on this study should be made available to the Heads of the communities in order to sensitize the government on the need for the WASH facilities in their domain or political jurisdiction.

Appendix I: Training Programme (8th – 10th April, 2008)

Time	Topic	Facilitator
8.30 – 9.00	Registration	Rahila
9.00 – 10.00	Introductory session , self introduction of participants/facilitators, ground rules, tea breaks and lunch times, Fears and Expectations.	Sani
10.00 – 10.30	Opening Ceremony <ul style="list-style-type: none"> - Welcome Introduction with objectives of training - National Perspective for WASH - Overview of Sanitation/IYS 	Yetunde Agada Sridhar
10.30 – 11.00	Tea Break	Secretariat
11.00 – 11.45	<ul style="list-style-type: none"> ▪ Workshop Agenda ▪ Introduction to KAP KAP methodologies, dependent on sanitation, Relationship between KAP objectives and indicators (ToR) KAP survey tools, Consideration and determining the appropriate survey method and tools.	Yetunde Sridhar
11.45 – 12.30	Experience sharing of qualitative and quantitative tools development, data gathering, data analysis and reporting	Sridhar Akinyemi Okareh Dossah Sani Ahmed
12.30 – 13.30	LUNCH	Secretariat
13.30 – 14.30	Sampling frame and target population, Sampling calculations	Akinyemi
14.30 – 16.15	Group work- Development of sampling methodology and total samples for State/LGA/Communities State plans for resources (transport, food, accommodation forms etc)	State Facilitators
16.15 – 17.15	Development of proposals by each State	All Facilitators
17.15 – 18.00	Presentation of sampling plan (Wards/dates/number of facilitators etc.)	Okareh
18.00 – 18.30	Group Evaluation of Day/Feedback to plenary	Rahila
Day 2		
8.30 – 9.00	Recap of Day 1	Sani Yaro
9.00 – 9.45	Introduction to the House to House Survey Questionnaire	Sridhar
9.45 – 11.45	Qualitative methods	Dossah Sani Ahmed
11.45 – 12.30	Relation between CAPs and KAP Survey and strategy to avoid duplication of data	Yetunde
12.30 – 13.30	LUNCH (packed lunch)	
13.30 – 17.00	Field Work- Qualitative survey (Maru LGA) – 4 groups	All Facilitators
17.00 – 18.00	Debriefing; Feedback to Plenary/Observation/Experiences	Dossah
Day 3		
8.30 – 9.00	Recap of Day 2	Groups

9.00 – 10.30	Detailed Review of the survey instruments (Questionnaire, FGD, KII)	Dossah Sani Ahmed Sridhar Okareh Akinyemi
10.30 – 11.00	BREAK	
11.00 – 12.30	Field Work – Pre-test of H/H Questionnaire	
12.30 – 13.30	LUNCH	
13.30 – 16.15	Epidata Training	Akinyemi Nathaniel
16.15 – 16.45	Way Forward	
16.45 – 17.00	Evaluation – Post Test	Okareh