Annexure 1

Questionnaires for Household Survey

Questionnaire for In-house Piped Supply Households

Date of Interview:

Part One: Household Profile Data

Name of Respondent:
Age/Sex:
Address
Occupation:

Total Number of members in the household:

<table>
<thead>
<tr>
<th>Adult Male</th>
<th>Adult Female</th>
<th>Children</th>
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</thead>
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<tr>
<td>Name</td>
<td>Age</td>
<td>Occupation</td>
</tr>
</tbody>
</table>

Part Two: Household Socio-Economic Data

1) Type of House
   • Independent house (1)
   • Apartments (2)

2) What is the average monthly family income?
   • 0 – 5000 (1)
   • 5000 – 10,000 (2)
   • 10,000 to 20,000 (3)
   • 20,000 to 30,000 (4)
   • 30,000 – 40,000 (5)
3) Level of Equipment/Assets owned:

- Four Wheelers
- Two Wheelers
- Air Conditioners
- Computer
- Landline Telephone
- Mobile Telephone
- Colour TV
- B/W TV
- Music System
- Refrigerator
- Radio

Part Three: Water Amenities And Service Data

4) What is the main source of household water?
   DJB (1)
   Private or Personal (handpump etc) (2)
   Vendor / Other (3)

What is the major source of household drinking water?
   DJB supply (1)
   Borewell/Tubewell (2)
   Bottled (3)
   Others (4)

What is the total number of water sources?
- One (1)
- Two (2)
- Three (3)
- Four (4)
- More (5)
5) If using a private bore well or a motor attached on a DJB connection:
   Yes (1)
   No (2)

Installation cost:
Maintenance cost:
Frequency/time of use:

6) What are the timings of DJB water supply & In total for how much time water comes each day via DJB connection?:
   • 24 hrs (1) Hours
   • Mornings (2) Minutes
   • Afternoon (3)
   • Evenings (4)
   • Late evenings (5)
   • Night / Wee hours (6)
   • No Fixed Time Most Unreliable (7)

Is there a seasonal variation in this amount of time? If yes, then how much?
Yes (1)
No (2)
   • In Summer
   • In Winter

How do you assess the reliability of Water supply
Very Good (1)
Good (2)
Neither good or bad (3)
Satisfactory (4)
Bad (5)
Very bad (6)
Perpetual Uncertainty (7)

How long did the latest water shortage last?
• Several minutes (1)
• Several hours (2)
• Several days (3)
• Do not know (4)

How has the availability of water changed in the last 5 years
  • Improved (1)
  • Slightly Improved (2)
  • Same (3)
  • Deteriorated (4)
  • Worsened (5)

7) Storage Capacity (in litres):
  0-10 (1)
  10-50 (2)
  50-100 (3)
  100-500 (4)
  500-1000 (5)
  Above 1000 (6)

Is it sufficient?
  Never (1)
  Sometimes (2)
  Usually (3)
  Always (4)

If no, how much more water you need daily than what you get?

  ¼ more (1)
  1/3 more (2)
  ½ more (3)
  Double (4)
  Triple (5)
  Four times more (6)
  Much More than Four Times (7)

Cost of Storage Capacity and maintenance costs:
Storage Devices and their numbers:

- Jerricans/Gallons (1)
- Drums (2)
- Tubs (3)
- Buckets (4)
- Tanks (5)
- Other (6)

8) Does your household use water for?

- Drinking (1)
- Cooking (2)
- Bathing (3)
- Toilet (4)
- Washing (5)
- Laundering (6)
- Flower Pots or Garden/Lawn watering (7)
- Car washing (8)
- Others (9)

9) What are the major water using appliance and their number?

- Shower (1)
- Flushing toilet (2)
- Hand basin (3)
- Bath tub (4)
- Washing machine (5)
- Dish washer (6)
- Kitchen Sink (7)
- Air Cooler (8)
- Others (9)

10) For bathing, which of the followings do household members use?

- Mug (1)
- Bucket & Mug (2)
- Shower (3)
- Tub bathing (4)
• Others (5)

What is the bathing frequency?
• Once a day (1)
• Twice a day (2)
• Three times a day (3)
• Once a week (4)
• Twice a week (5)
• Thrice a week (6)
• More than a week (7)

How long does each bath last?
• Less than 3 mins (1)
• 3-5 mins (2)
• 5-10 mins (3)
• More than 10 Mins (4)

11) In a typical week, what is the frequency of household laundry?
• Everyday (1)
• Once two days (2)
• Once three days (3)
• Once a week (4)
• Others (5)

12) How much drinking water (in litres) does each of your household members consume each day?
• Less than 1 (1)
• 1-2 (2)
• 2-3 (3)
• 3-4 (4)
• 4-5 (5)
• More than 5 lts (6)

13) Do you treat the Drinking Water? What is the mode and how much does the cost come to?
Yes (1)
No (2)
Occasionally (3)
Straining (1)
Boiling (2)
Chlorine Tablets (3)
Zero B or other non-electric purifier (4)
Aquaguard (5)
Reverse Osmosis (6)
Other (7)

Part Four: Household Water Use Behavior And Perception Data

14) How is the water pressure level? (DJB Connection)
   Very good (1)
   Good (2)
   Satisfactory (3)
   Bad (4)
   Very bad (5)

   Are there any daily/seasonal pressure variations (DJB connection):
   • No variations (1)
   • Yes (2)
   • Do not know (3)

15) What do you think of DJB water quality?
   Good (1)
   Very Good (2)
   Okay (3)
   Bad (4)
   Very Bad (5)

   Is the water from the DJB source safe to drink

   Always (1)
   Usually (2)
   Sometimes (3)
   Few times (4)
   Never (5)
Is the water from the DJB source clear
Always (1)
Usually (2)
Sometimes (3)
Few times (4)
Never (5)

Does the water from the DJB source taste good
Always (1)
Usually (2)
Sometimes (3)
Few times (4)
Never (5)
Do Not Know, No Direct Consumption (6)

Is the water from the DJB source free from odours
Always (1)
Usually (2)
Sometimes (3)
Few times (4)
Never (5)

Has anyone suffered water related diseases due to contaminated water supply at home? What is the frequency of falling sick to water borne diseases?
Yes (1)
No (2)

Once or more in last 2 months (1)
Once or more in last 6 months (2)

16) How do you assess the wastage of water in your house?
Negligible (1)
Little (2)
More than Normal (3)
High (4)
Very High (5)

In terms of personal use
In terms of leakage in pipeline connecting to house
In terms of leaking taps/tanks/containers at home

17) Is the Water Supply metered?
   Yes (1)
   No (2)
   Do not Know (3)

How much the last bill came for?

What is the average monthly water bill?
   By metering
   Private mechanisms
   Vendors
   Others

   What does that payment represent a proportion of household income?
Negligible (1)
Affordable (2)
Heavy (3)
Very Heavy to Manage (4)
Unaffordable (5)

   What is your perception of water tariff system of DJB
Very Cheap (1)
Cheap (2)
Affordable (3)
Costly (4)
Very Costly (5)
Unaffordable (6)

18) Have you ever raised complaints with DJB for any reason? If yes then for what reason and what was the mode/mechanism of complaint:
Yes (1)
19) Have you ever felt the need of tanker from DJB
   - Yes (1)
   - No (2)
   - Once (3)
   - More than Once (4)

   Tanker Service of DJB

   Very Good (1)
   Good (2)
   Satisfactory (3)
   Bad (4)
   Very Bad (5)

20) Does the water supply service have an impact on the activities in the house?
   - Somebody has to stay at home to fill it (1)
   - Somebody has to wake up early or other awkward timings (2)
   - There is no disturbance because A) you have adjusted to it (3a) B) It is not a problem (3b)
   - Water Supply is Reliable so never came across any adjustment (4)

   Who is responsible for water storage activities?
   Adult Men (1)
   Adult Women (2)
   Boys (3)
   Girls (4)
   Children under 12-14 yrs (5)
   Others (6)

   Are you spending more or less time in dealing with water storage or treating or availability now as compared to five years back? Explain? If you have gained time how do you think it is generally used? If you have lost time what are the losses like?
   More (1)
   Less (2)
   No Change (3)

21) Do you think water is equitably used among the people in your community/area?
Explain & Discuss. Would you like to add to this in terms of looking at the whole city?

Yes, distributed equally in our area (1)
No, not distributed equally in our area (2)

Overall Delhi perception:
Yes (1)  
No (2)

Different storage capacity (1)
Inability to pay (2)
Restricted hours (3)
Influence or Pressure tactics by some to have more water leaves some others with less (4)
Insufficient Supply (5)
Other (6)

22) Given a choice of proposed improvements, what would your priority be?

- Provide a water connection (1)
- Increase the water quality (2)
- Increase in pressure (3)
- Change in time schedule (4)
- Provide a regular service (5)
- Add extra hours (6)
- Proper Billing (7)
- Service Quality (8)
- Maintenance (9)

23) Are you are willing to pay more for water? If yes, where should the DJB invest the extra revenue?

Yes (1)
No (2)

- Improve reliability (1)
- Improve quality (2)
- Improve pressure (3)
- Prevent water pollution (4)
- Improve management (5)
- Others (6)
24) What do you like most and least about your water supply?

How would you rate the existing water supply service?

- Excellent (1)
- Very good (2)
- Good (3)
- Satisfactory (4)
- Bad (5)
- Very Bad (6)

Why? 

25) Are there any water-saving measures practiced in the household?

- Yes (1)
- No (2)

If yes, please explain:

**Questionnaire for Kachha houses/ Jhuggi Jhopri / Slums / Squatters**

*(Not having any piped DJB direct to home supply)*

Date of Interview:

**Part One : Household Profile Data**

Name of Respondent:
Age
Sex

Address

Occupation:

Total Number of members in the household:

<table>
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<tr>
<th>Adult Male</th>
<th>Adult Female</th>
<th>Children</th>
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</tbody>
</table>
1) Type of the housing ownership or Status of Occupancy?
   - Owned (1)
   - Rented (specify rent_______) (2)
   - Other (3)

2) Type of House
   - Unauthorised (1)
   - Authorised/Regularised (2)
   - Pucca (3)
   - Kaccha (4)

3) What is the average family income?
   - 0-1000 (1)
   - 1000-2000 (2)
   - 2000-3000 (3)
   - more (specify_______) (4)

4) What is the main source of household water?
   DJB Standpost (1)
   Private or Personal (handpump etc.) (2)
   Vendor (3)
   Other (4)

Distance to water source
   Near (0-50 mts) (1)
   Far (50-100 mts) (2)
   Very far (more than 100 mts) (3)

What is the total number of water sources?
   One (1)
   Two (2)
   Three (3)
   More (4)
5) Do you or your Household members have difficulty in obtaining water? If yes, in what aspect do you have difficulty in obtaining water?

Yes (1)
No (2)

6) If DJB water supply, is the DJB water connection shared between more than one family/household?

If yes, then between how many? How many persons utilizing one supply?

Yes (1)
No (2)

7) Are you using any motor/borewell? What is the cost?

Yes (1)
No (2)

8) What are the timings of DJB Stand post water supply & in total for how much time water comes each day at stand post?

- 24 hrs (1)
- Mornings (2)
- Afternoon (3)
- Evenings (4)
- Late evenings (5)
- Night / Wee hours (6)
- No Fixed Time Most Unreliable (7)

Hours
Minutes

Reliability of Water supply

Very Good (1)
Good (2)
Neither good or bad (3)
Satisfactory (4)
Bad (5)
Very bad (6)
Perpetual Uncertainty (7)
If there is a Tanker Service of DJB
Very Good (1)
Good (2)
Satisfactory (3)
Bad (4)
Very Bad (5)

Who repairs the water supply at stand post when it has a problem?

How do you tell the authorities about the water problems in your area?

How much time do they take to respond?

How long did the latest water shortage last?
  • Several minutes (1)
  • Several hours (2)
  • Several days (3)
  • Do not know (4)

9) What are the timings of Private water vendor supply?
  • 24 hrs (1)
  • Mornings (2)
  • Afternoon (3)
  • Evenings (4)
  • Late evenings (5)
  • Night/ Wee hours (6)

10) Do you fetch water for drinking & washing from same source? If no, then why?
Yes (1)
No (2)

How has the availability of water changed in the last 5 years
  • Improved (1)
  • Slightly Improved (2)
  • Same (3)
  • Deteriorated (4)
Who normally fetches water for your household use?

Adult Men (1)
Adult Women (2)
Boys (3)
Girls (4)
Children under 12-14 yrs (5)
Others (6)

How many times this activity is performed during the day?

Once (1)
Twice (2)
Thrice (3)
More (4)

Waiting time at water stand post/tanker source?

Less than 15 mins (1)
15-30 mins (2)
30-60 mins (3)
more than 1 hour (4)

Time taken in travelling to and from water source:

Less than 15 mins (1)
15-30 mins (2)
30-60 mins (3)
more than 1 hour (4)

Is there a rush/overcrowding at stand post/tanker?

Yes, Regularly (1)
No (2)
Sometimes (3)

11) What kind of vessels do you or your family use to carry water?

12) How much water you fetch (in litres)?

0-25 litres (1)
25-50 litres (2)
50-100 litres (3)
Above 100 (4)

Storage Devices and their numbers:

- Jerricans/Gallons (1)
- Drums (2)
- Buckets (3)
- Other (4)

Storage Capacity:

- 0-10 (1)
- 10-50 (2)
- 50-100 (3)
- 100-500 (4)
- 500-1000 (5)
- Above 1000 (6)

Is it sufficient?

Never (1)
Sometimes (2)
Usually (3)
Always (4)

If no, how much more water you need daily than what you get?

¼ more (1)
1/3 more (2)
½ more (3)
Double (4)
Triple (5)
Four times more (6)
Much More than Four Times (7)
13) Does your household use water for?
   - Drinking (1)
   - Cooking (2)
   - Bathing (3)
   - Toilet (4)
   - Washing (5)
   - Laundering (6)
   - Others (7)

14) For bathing, which of the followings do household members use?
   - None (1)
   - Mug (2)
   - Bucket & Mug (3)
   - Others (4)

What is the bathing frequency?
   - Once a day (1)
   - Twice a day (2)
   - Three times a day (3)
   - Once a week (4)
   - Twice a week (5)
   - Thrice a week (6)
   - More than a week (7)

How long does each bath last?
   - Less than 3 mins (1)
   - 3-5 mins (2)
   - 5-10 mins (3)
   - More than 10 Mins (4)

15) In a typical week, what is the frequency of household laundry?
   - Everyday (1)
   - Once two days (2)
   - Once three days (3)
   - Once a week (4)
   - Later than a week (5)
16) How much drinking water (in litres) does each of your household members consume each day?
   • Less than 1 (1)
   • 1-2 (2)
   • 2-3 (3)
   • 3-4 (4)
   • 4-5 (5)
   • More than 5 lts (6)

17) Do you treat drinking water? If yes then what is the mode & how much does it cost?
   • Yes (1)
   • No (2)
   • Occasionally (3)

   Straining (1)
   Boiling (2)
   Chlorine Tablets (3)
   Zero B or other non-electric purifier (4)
   Aquaguard (5)
   Reverse Osmosis (6)
   Other (7)

18) How is the water pressure level? (DJB Standpost)
   Very good (1)
   good (2)
   satisfactory (3)
   bad (4)
   very bad (5)

   Are there any daily/seasonal pressure variations(DJB standpost):
   • No variations (1)
   • Yes (2)

19) What do you think of DJB water quality?
   Very Good (1)
   Good (2)
   Okay (3)
Is the water from the DJB source safe to drink
Always (1)
Usually (2)
Sometimes (3)
Few times (4)
Never (5)

Is the water from the DJB source clear
Always (1)
Usually (2)
Sometimes (3)
Few times (4)
Never (5)

Does the water from the DJB source taste good
Always (1)
Usually (2)
Sometimes (3)
Few times (4)
Never (5)
Never Tasted Directly (6)

Is the water from the DJB source free from odours
Always (1)
Usually (2)
Sometimes (3)
Few times (4)
Never (5)

20) Looking at water supply, what are the division of tasks and responsibilities, especially role of women?
Shared Responsibility With Men and other family members (1)
Complete Responsibility (2)
Are the family members spending less or more time in fetching water now compared to five years ago? Explain the impacts.

More (1)
Less (2)
Same (3)

21) Are you supposed to pay for water you use?
Yes (1)
No (2)
Sometimes, depending upon source (3)

How much on an average you pay every day/month?

Whom do you pay the fee?

What does that payment represent a proportion of household income?
Negligible (1)
Affordable (2)
Heavy (3)
Very Heavy to Manage (4)
Unaffordable (5)

Have you ever raised complaints with DJB for any reason? If yes then for what reason and what was the mode/mechanism of complaint:
Yes (1)
No (2)

Have you ever felt the need of tanker from DJB
- Yes (1)
- No (2)
- Once (3)
- More than Once (4)

Tanker Service of DJB

Very Good (1)
Good (2)
Satisfactory (3)
Bad (4)
Very Bad (5)

22) Do you think water is equitably used among the people in your community/area?

Explain

Yes (1)
No (2)

Looking at overall Delhi, if yes, why do you think it is unequally distributed:

 Few Taps (1)
 Different storage capacity (2)
 Inability to pay (3)
 Restricted hours (4)
 Influence or Pressure tactics by some to have more water leaves some others with less (5)
 Insufficient Supply (6)
 Other (7)

23) How is the location of a communal water point determined or selected?

- Centrality of source to most households (1)
- Near most vocal households (2)
- Near to socially, economically or politically powerful person or persons houses (3)
- Geological setup (4)
- Others (5)

25) Is there any water user committee or RWA or any such body which takes care of water supply issues? Explain its functioning and your participation in it. How are decisions taken? Are you informed of the decisions?

Yes (1)
No (2)
Yes, But non-functional (3)

26) What is the support available from government, private bodies, NGOs or others in terms of your water supply mechanisms?

Yes (1)
No (2)
27) What is the main constraint your household is facing in accessing safe & adequate water?

- No constraint (1)
- Long distance (2)
- Inadequate sources (3)
- High cost (4)
- Others (5)

28) Given a choice of proposed improvements, what would your priority?

- Provide a water connection (1)
- Increase the water quality (2)
- Increase in pressure (3)
- Change in time schedule (4)
- Provide a regular service (5)
- Add extra hours (6)
- Service Quality (7)
- Maintenance (8)

How would you rate the existing water supply service?

- Excellent (1)
- Very good (2)
- Good (3)
- Satisfactory (4)
- Bad (5)
- Very Bad (6)

Why?__________________

29) What do you like most and least about your water supply?