

## Spatial Estimate Around a Water Point

Date: \_\_\_\_\_ Health Zone: \_\_\_\_\_ Village: \_\_\_\_\_

Water Source Identification: \_\_\_\_\_

GPS: Lat \_\_\_\_\_ Long \_\_\_\_\_ Data Collected by: \_\_\_\_\_

H <sup>h</sup> old No.	Distance from Water Source (m)	# Occupants in Household	# Huts in Family	Water Collected (l)	# Latrine Stances	# Cases of Diarrhea	Collection Capacity (l)	Remarks
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
<b>TOTAL</b>	-----							

### ***Procedure:***

1. Go to water source and estimate yield (liters/day) by timing amount of water collected over a precise time period (10-15 minutes). Include only water collected and taken away from source by user.
2. Ask those collecting water what general timeframes the source is used throughout the day. Confirm with 2 or 3 persons.
3. Select 3 or 4 precise radials from the water source for selecting and interviewing respondents. Determine a pre-selected interval that you will maintain between households throughout the survey (between 20-100 meters – based on population density).
4. Start on first radial from water source. Upon reaching first household, ask questions beneath and record data. Proceed on radial to subsequent households at predetermined intervals. Ask questions and record data. If no one is available at the household selected, move to the nearest household where occupants are present. Record number of houses visited where no occupants were present in space to right of “household no.” This can be used later to quantify % of residents present during the survey.
5. Upon reaching 3 households consecutively which do not collect water at this source, return to source and start on a new radial. Radials should be separated by at least 90 degrees.
6. Continue until you have interviewed between 10 and 20 households. Note that once you begin a radial, you must continue until you reach the point where respondents state they do not collect water from this source.
7. Total up columns and calculate statistics using formulae below.

### ***Summary Formulae:***

- |  |  |
|--|--|
| 1. Population of Source Users          | = Source Yield / Average Daily Water Consumption                             |
| 2. Source Yield (l/d)                  | = (Water Collected/Time Period) x (60 min/hour) x (Daily Hours of Operation) |
| 3. Average # of people per family      | = Total # Occupants in Household / # Households Interviewed                  |
| 4. Average # huts per family           | = Total # Huts / # Households Interviewed                                    |
| 5. Average Daily Water Consumption     | = Total Water Collected / Total # Occupants in Household (l/p/d)             |
| 6. Average # people per latrine stance | = Total # Occupants in Household / Total # Latrine Stances                   |
| 7. Percentage Cases of Diarrhea        | = (Total Cases of Diarrhea / Total # Occupants in Household) x100            |
| 8. Collection Capacity per family      | = Total Collection Capacity / # Households Interviewed                       |

**POPULATION:** \_\_\_\_\_

**OCCUPANTS / HOUSEHOLD** \_\_\_\_\_ **HUTS / FAMILY** \_\_\_\_\_ **WATER CONSUMPTION (l/p/d)** \_\_\_\_\_

**LATRINE COVERAGE** \_\_\_\_\_ **% CASES DIARRHEA** \_\_\_\_\_ **COLLECTION CAPACITY (l/family)** \_\_\_\_\_

## QUESTIONS:

1. Yesterday did you collect water from the source in question?
2. How many people are in your family? How many slept here last night?
3. How many huts are in your family?
4. How much water did you collect yesterday?
5. Does your family have a latrine? Show me your latrine? (For verification)  
With how many families do you share that latrine? How many stances are in the latrine?

Note: If a family shares a latrine, they should be given partial credit for latrine ownership. For instance, if the family shares a 2-stance latrine with 2 other families, they should be given credit for  $2/3$  (two-thirds) of a latrine. That is, 2 stances shared by three families.

6. How many cases of Diarrhea have you had in your family within the past 24 hours?

Note: Diarrhea = minimum of 3 watery stools in a 24 hour period.

7. How many containers do you have for water collection? What are the sizes?