

HAND PUMP BOREHOLE FUNCTIONALITY SURVEY

NAME OF THE BOREHOLE & ID:

TA:

VILLAGE:

Basic information

Interviewee name(s)

Interviewee role

- ☐ Area Mechanic
- ☐ Chief/Village Headman
- ☐ Community member
- ☐ Councilor
- ☐ Head teacher / Teacher
- ☐ HSA / Health officer
- ☐ Hand pump borehole committee chair
- ☐ Hand pump borehole committee member
- ☐ Hand pump borehole owner
- ☐ Water seller
- ☐ Water User Association / Water Board member

If Do I have your permission to proceed with the survey? Is Yes:

1.0 FUNCTIONALITY AND AVAILABILITY

Take a photo of the borehole

Hint: Photo should focus on infrastructure only (not people), with hand pump borehole in center of the photo

If Hand pump borehole linked to this survey

1.01 Functional status

This question is used to assess whether a hand pump borehole is working as designed or if some failure is impacting performance. The dictionary definition of functional is "working properly." A hand pump borehole may be working properly but not actually providing water at the time of a visit due to rationing, opening hours, or limited aquifer capacity. The availability or reliability of water should be assessed separately using the other questions.

Definitions of functional status:

•**Functional:** Hand pump borehole is in good working condition and regularly provides water according to the specifications in the original design.

•**Partially functional but in need of repair:** Hand pump borehole provides water on a regular basis (possibly in a reduced capacity) but repairs are needed due to some maintenance issue or change in conditions at the site.

•**Not functional:** Hand pump borehole is no longer providing water on a regular basis. This could be due to maintenance issues, changes in water availability or quality, or problems with access to the hand pump borehole.

•**No longer exists:** The hand pump borehole can no longer be found at the original site or has been decommissioned.

How to assess functionality

Try to determine from local water users whether the hand pump borehole functions as intended. If possible, perform a quick flow or pumping test to verify functionality. You may need to request special permission to access the hand pump borehole if you are visiting outside of the opening hours.

Special considerations

•**Sometimes the water dries up each day.** If users are still able to access enough water during the opening hours, you might still report such a hand pump borehole as functional.

•**If the hand pump borehole does not provide water at certain times of the year due to scarcity,** please address this in the following questions regarding accessibility and reliability.

- ☐ Functional
- ☐ Partially functional but in need of repair
- ☐ Not functional
- ☐ No longer exists or abandoned

If Functional status is one of not functional, No longer exists or abandoned:

1.02 How long has the hand pump borehole been non-functional or abandoned?

If Functional status is No longer exists or abandoned:

1.03 Why was the hand pump borehole abandoned?

If Functional status is Functional:

1.04 Are there any current problems with the hand pump borehole that require attention?

If Functional status isn't No longer exists or abandoned and Are there any current problems with the hand pump borehole that require attention? Isn't one of No, Don't know:

1.05 What is the current problem?

If Functional status isn't No longer exists or abandoned:

1.06 Is water available from the hand pump borehole on the day of the visit?

☐ Yes

☐ No

If is water available from the hand pump borehole on the day of the visit? Is No:

1.07 Why isn't water available from the system on the day of the visit?

If Functional status isn't one of No longer exists or abandoned, Not functional:

1.08 In the last 30 days, has this hand pump borehole provided a continuous supply of water all day every day?

Hint:

☐ Yes

☐ No

☐ Don't know

If In the last 30 days, has this hand pump borehole provided a continuous supply of water all day every day? Is No:

1.09 In the last 30 days, how many days has the hand pump borehole provided water?

☐ 1 day

☐ 2 - 7 days

☐ 8 - 21 days

☐ More than 21 days

If In the last 30 days, has this hand pump borehole provided a continuous supply of water all day every day? Is No:

1.10 In the last 30 days, why was water not available for one or more days?

If In the last 30 days, why was water not available for one or more days? Is one of Low water pressure, No Plumber or Area Mechanic/No one knows how to fix it, Parts are not available, System is not functional, Poor water quality:

1.10 If the hand pump borehole was repaired in the last 30 days, how many days did it take to get repaired?

2.0 RELIABILITY AND MAINTENANCE

2.03 Has the hand pump borehole been rehabilitated?

Hint: A rehabilitation is considered any single upgrade costing more than 1,500,000K.

- ☐ Yes
- ☐ No
- ☐ Don't know

If has the hand pump borehole been rehabilitated? Is Yes:

2.04 Which year was the hand pump borehole rehabilitated?

2.07 Have any major repairs/additions been completed on the hand pump borehole in the past year?
Hint: A 'major' repair is considered any single repair costing more than 50,000K. For this question, a major repair is NOT a full rehabilitation.

- ☐ Yes
- ☐ No
- ☐ Don't know

2.08 If have any major repairs/additions been completed on the hand pump borehole in the past year? Is Yes and Hand pump borehole linked to this survey > Pump/lifting device is Afridev:

Which Afridev parts were repaired/replaced?

2.09 If Which Afridev parts were repaired/replaced? Includes Rods:

How many rods were replaced?

2.10 If have any major repairs/additions been completed on the hand pump borehole in the past year? Is Yes and Hand pump borehole linked to this survey > Pump/lifting device is not afridev:

Which parts were repaired/replaced?

2.11. If have any major repairs/additions been completed on the hand pump borehole in the past year?
Is Yes: How much did the repairs/upgrade cost (in Kwacha)?

2.12 If have any major repairs/additions been completed on the hand pump borehole in the past year?
Is Yes: Who did the repair?

WATERPOINT/ WASH COMMITTEES QUESTIONS

4.04 Is this hand pump borehole managed by a water/WaSH committee?

- ☐ Yes
- ☐ No
- ☐ Decline to state
- ☐ Don't Know

If 4.04. [For enumerator] Is this your first interview with the respondent? Is Yes and 4.04.

4.05 Is this hand pump borehole managed by a water/Wash committee? Is Yes:

A. How many people are on the Hand pump borehole Committee?

B. How many women are on the Hand pump borehole Committee?

4.05 What is the gender of the Treasurer for the Hand pump borehole Committee?

- ☐ Female
- ☐ Male

If 4.04. Is this hand pump borehole managed by a water/WaSH committee? Is Yes:

4.06. How many active people/members serve on the water/ WaSH Committee?

Hint: Active members are those who regularly participate in WaSH Committee activities

☐ Don't Know

☐ Not Applicable

4.08. What positions do women hold on the Water/ WaSH committee? (Select all that apply)

☐ Don't Know

If 4.04. Is this hand pump borehole managed by a water committee? Is Yes:

4.10 When was the last time the Water committee met?

☐ Don't Know

☐ Not Applicable

If 4.04. Is this hand pump borehole managed by a water committee? Is Yes:

4.11 Does the Water committee ever hold meetings with the community?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If 4.06. Does the Water/ WaSH committee ever hold meetings with the community? Is Yes:

4.12 When was the last time that the Water/ WaSH committee held a community meeting?

☐ Don't Know

☐ Not Applicable

If 4.11 Does the Water/ WaSH committee ever hold meetings with the community? Is Yes:

4.13 About how many community members attended the last meeting?

☐ Don't Know

☐ Not Applicable

If 4.04 is this hand pump borehole managed by a water/WaSH committee? Is Yes:

4.14 What activities has the Water/ WaSH committee done in the past year? (Do not prompt. Check boxes next to all categories mentioned by respondent.)

If 4.04 is this hand pump borehole managed by a water/WaSH committee? Is Yes:

4.15 Were Water/WaSH committee members elected or appointed?

☐ Elected

☐ Appointed

☐ Decline to state

☐ Don't Know

4.16 Do you conduct preventive maintenance?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

4.17 If yes, how frequent?

4.18 When did you last do the maintenance?

4.19 If no, what are the reasons?

4.20 Do you require external support? If yes, what?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If yes, what?

☐ Don't Know

4.21 Who do you call when repairs are beyond your capacity?

☐ Don't Know

4.17 If yes, can you do major repairs as a committee?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If is water available from the hand pump borehole on the day of the visit? Is Yes:

3.0 WATER SYSTEM SUSTAINABILITY

3.01 What year was the hand pump borehole constructed? (All dates must be in Gregorian calendar YYYY)

☐ Don't Know

☐ Not Applicable

3.02 How many households use (d) this hand pump borehole?

☐ Don't Know

☐ Not Applicable

6.03 How many households are (were) registered users of the hand pump borehole?

☐ Don't Know

☐ Not Applicable

If 6.03. How many households are (were) registered users of the hand pump borehole? Is one of Don't Know, Not Applicable?

6.04 Is there a record book for registered users that can be viewed?

☐ Yes

☐ No record book available, number is an estimate

☐ Not Applicable

If b is there a record book for registered users that can be viewed? Is Yes:

6.05 [Observe] Record the number of registered users of the hand pump borehole listed in the record Book

If 4.01. [Observe] What type of hand pump borehole is this? (Check box next to the appropriate category.) Is one of Borehole (with hand pump/pump?)

6.06 What type of hand pump is present? (Check box next to the appropriate category.)

☐ Don't Know

6.07 Does (did) the hand pump borehole have a fee collection system?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If 6.07 does (did) the hand pump borehole have a fee collection system? Is Yes:

6.08 Is (was) the water fee collected on a regular schedule?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If. Does (did) the hand pump borehole have a fee collection system? Is Yes:

6.09 How many households in the community paid a water fee the last time it was collected?

☐ Don't Know

☐ Not Applicable

6.10 Is there a tariff or user fee for water use from the hand pump borehole?

☐ Yes

☐ No

If 6.10 is there a tariff or user fee for water use from the hand pump borehole? Is No:

6.11 Why is there no tariff or user fee?

If is there a tariff or user fee for water use from the hand pump borehole? Is No:

6.12 What happens when the hand pump borehole breaks down?

If is there a tariff or user fee for water use from the hand pump borehole? Is Yes:

6.13 How often is the tariff/user fee collected?

If is there a tariff or user fee for water use from the hand pump borehole? Is Yes:

6.14 How much is the tariff/user fee (in Kwacha)?

If is there a tariff or user fee for water use from the hand pump borehole? Is Yes:

6.15 What costs were considered when setting the tariff or user fee? If Is there a service provider or someone responsible for operating and/or maintaining this hand pump borehole or water system? Is Yes and is there a tariff or user fee for water use from the improved hand pump borehole? Is Yes:

6.16 Are there financial records/books for the hand pump borehole?

☐ Yes

☐ No

☐ Could not determine

If are there financial records/books for the hand pump borehole? Is Yes:

6.17 Is it possible to review the records/books? Hint: OBSERVE

☐ Yes

☐ No

If is it possible to review the records/books? Is Yes:

6.18 Is there a positive balance in the records? Hint: OBSERVE

☐ Yes

☐ No

☐ Could not determine

If is it possible to review the records/books? Is Yes:

6.19 Do the financial records show evidence of any savings or payment of loans? Hint: OBSERVE

☐ Yes

☐ No

☐ Could not determine

If is it possible to review the records/books? Is Yes:

6.20 What is the balance listed in the records (in Kwacha)?

If is there a service provider or someone responsible for operating and/or maintaining this hand pump borehole or water system? Is Yes and is there a tariff or user fee for water use from the improved hand pump borehole? Is Yes:

6.21 Does the service provider have a bank account?

Hint: With any local commercial bank e.g. Standard Bank, National Bank, NBS Bank, etc.

☐ Yes

☐ No

If does the service provider have a bank account? Is Yes and is there a positive balance in the records? Is any of Yes?

A. How much is the bank balance

If Does the service provider have a bank account? Is No:

B. What do you do with the cash collected?

If Is this hand pump borehole managed by a water committee? Is Yes:

6.23 The last time this hand pump borehole broke down, did the water committee collect additional money from community members to cover the cost of repairs?

- ☐ Yes
- ☐ No
- ☐ Decline to state
- ☐ Don't Know

If. [For enumerator] Is this your first interview with the respondent? Is Yes:

6.24 In some communities, water users will make non-monetary contributions to help keep water facilities running. Do you know of one or more community members who have contributed the following: [Read answer choices and choose all that apply?

- ☐ Communal labor (ex: farming)
- ☐ Donate goods or livestock (ex: shear nuts, maize, bowl of rice)
- ☐ Fundraising activities
- ☐ Other (please specify)

☐ Decline to state

☐ Don't Know

☐ Not Applicable

If [For enumerator] Is this your first interview with the respondent? Is Yes:

6.25 Does (did) your community have sufficient funds to support operations and maintenance?

- ☐ Yes
- ☐ No
- ☐ Decline to state
- ☐ Don't Know

If Does (did) your community have sufficient funds to support operations and maintenance? Is Yes:

6.26 How much money do you currently have for supporting operations and maintenance? *Hint: Answer should be reported in the standard currency for this country*

☐ Don't Know

☐ Not Applicable

A. How much do you source to support operations and maintenance annually?

B. How much money do u need to manage this borehole without financial problems annually?

If [For enumerator] Is this your first interview with the respondent? Is Yes:

6.27 How far away are (were) the materials you use for hand pump borehole repairs (ex. spare parts, tools, etc.)? (Check box next to the appropriate category.)

☐ Accessible within the community

☐ 0-20 km away

☐ >20 km away

☐ Decline to state

☐ Don't Know

If [For enumerator] Is this your first interview with the respondent? Is Yes:

6.28 How long does it take to get the materials you use for hand pump borehole repairs (e.g. spare parts, tools, etc.?)

☐ Don't Know

☐ Not Applicable

6.29 Do you call someone to assess or fix the hand pump borehole if there is (was) a technical problem that cannot be fixed on this hand pump borehole? ☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If Do you call someone to assess or fix the hand pump borehole if there is (was) a technical problem that cannot be fixed on this hand pump borehole? Is Yes:

6.30 How long does it take for them to arrive?

☐ Don't Know

☐ Not Applicable

If do you call someone to assess or fix the hand pump borehole if there is (was) a technical problem that cannot be fixed on this hand pump borehole? Is Yes:

6.30 Did the person come the last time you called?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

☐ Not Applicable

6.32 Does (did) your community have a plan for operation and maintenance of the hand pump borehole?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

6.33 Is (was) there at least one operator or caretaker for this hand pump borehole?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If is (was) there at least one operator or caretaker for this hand pump borehole? Is Yes:

6.34 Has at least one of these people received training in operation and maintenance of the system?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If is (was) there at least one operator or caretaker for this hand pump borehole? Is Yes:

6.35 Is (was) the operator/caretaker paid?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If Is (was) the operator/caretaker paid? Is Yes:

6.36 How much is (was) she/he paid per month? *Hint: Answer in standard currency for this Malawi*

☐ Don't Know

☐ Not Applicable

If Is (was) there at least one operator or caretaker for this hand pump borehole? Is Yes:

6.37 How many hours does (did) the operator or caretaker work each month?

☐ Don't Know

☐ Not Applicable

6.38 Who financed the construction of this hand pump borehole (select all that apply)?

☐ Don't Know

6.40 Does the hand pump borehole have continuous water service availability? (24 hours per day per year)

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If does the hand pump borehole have continuous water service availability? (24 hours per day per year) is No: 6.41 Does the hand pump borehole have only seasonal service?

- ☐ Yes
- ☐ No
- ☐ Decline to state
- ☐ Don't Know

If does the hand pump borehole have only seasonal service? Is Yes:

6.42 Does the hand pump borehole have continuous water service (24 hours/day) during the season when the hand pump borehole is available for use?

- ☐ Yes
- ☐ No
- ☐ Decline to state
- ☐ Don't Know

If Does the hand pump borehole have continuous water service availability? (24 hours per day per year) is No:

6.43 Does the hand pump borehole have a scheduled water service? *Hint: Scheduled water service is service that provides water at designated times of the day on a schedule*

- ☐ Yes
- ☐ No
- ☐ Decline to state
- ☐ Don't Know

6.44 How much time has passed since the last time this hand pump borehole was used?

6.45 [For enumerator] is the hand pump borehole functioning? Ask to conduct flow test *Hint: Functional means that water is coming out of the hand pump borehole*

- ☐ Yes
- ☐ No
- ☐ Decline to state
- ☐ Don't Know

6.46 [For Enumerator] Record the number of pump strokes required for water to come out.

6.47 Record number of pump strokes required to fill the 20 liter container *Hint: Stop after 50 strokes; record 999 if greater than 50*

☐ Not Applicable

6.48 [Timer question] Record the time required to fill the 20 liter container: *Hint: Stop after 10 minutes*

If [For enumerator] Is the hand pump borehole functioning? Ask to conduct flow test. Is No:

6.50 Has the hand pump borehole broken down in the past year?

Hint: A breakdown means the hand pump borehole was non-functional for a full day or more due to technical issues.

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If has the hand pump borehole broken down in the past year? Is Yes:

6.51 How many breakdowns happened in the past year?

If has the hand pump borehole broken down in the past year? Is Yes:

6.52 Has this hand pump borehole had a breakdown in the past two weeks?

☐ Yes

☐ No

☐ Decline to state

☐ Don't Know

If has the hand pump borehole broken down in the past year? Is Yes:

6.53 For what length of time was the hand pump borehole nonfunctional during its last breakdown?

☐ Don't Know `

☐ Not Applicable