



PHOTO CREDIT: KARI NELSON

# EVALUATION REPORT ETHIOPIA MILLENNIUM WATER ALLIANCE EX-POST EVALUATION

WASH Ex-Post Evaluation Series—Water Communications and Knowledge Management (CKM) Project

May 2018

## **AUTHORITY**

Prepared for USAID under the Water and Development Indefinite Delivery Indefinite Quantity Contract No. AID-OAA-I-14-00069, Task Order No. AID-OAA-TO-15-00046, awarded September 17, 2015, entitled "Water Communications and Knowledge Management (CKM) Project."

This final report is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of ECODIT LLC and do not necessarily reflect the views of USAID or the United States Government.

This report was prepared by the Water CKM project team, comprised of ECODIT LLC and Social Impact, Inc.

## **ACKNOWLEDGMENTS**

The evaluation team (ET) appreciates the keen involvement of the many stakeholders of the Millennium Water Alliance-Ethiopia Program. Notably, the ET gives thanks for the tireless support of Mussie Tezazu and the Millennium Water Alliance Ethiopia office throughout the entire evaluation process. The ET appreciates the participation and feedback of staff at each of the implementing partner organizations: CARE, Catholic Relief Services, Food for the Hungry, Lifewater International, Living Water International, Water Partners International (subsequently renamed Water.org), Hope 2020, World Vision, Relief Society of Tigray, Ethiopian Kale Hiwot Church, Water Action, and Ethiopian Evangelical Church Mekane Yesus-Development and Social Services Commission. Obtaining thorough documentation and insights into an activity that was completed nearly eight years ago can be very challenging. The thoughtful engagement of these organizations and their staff made this evaluation possible. The ET also thanks the staff at USAID, including Abigail Jones, Kathrin Tegenfeldt, Elizabeth Jordan, and Alison Macalady, for their steadfast support and feedback through the entire evaluation process.

# **TABLE OF CONTENTS**

Authority	i
Acknowledgments	ii
Acronyms	v
Executive Summary	vi
Purpose and Overview	vi
Scope	vi
Design	yii
Key Findings	vii
Discussion: Factors Affecting Sustainability	viii
Key Implications and Recommendations	x
Introduction	1
Overview of Activity and Budget	1
Evaluation Questions	4
Methodology	5
Sampling	5
Data Collection Methods	6
Quality Checks and Analysis	7
Limitations	7
Findings and Conclusions	<b>9</b>
Water Points: Current Status And Use	9
Water Points: Factors Affecting Sustainability	14
Latrines: Current Status And Use	24
Handwashing: Current Status	27
Latrines And Handwashing: Factors Affecting Sustainability	27
Recommendations	29
FIGURES	
	2
Figure 1. MWA-EP ObjectivesFigure 2. MWA-EP's Achievements	
Figure 3. Timeline of MWA-EP's Main Donors	
Figure 4. Evaluation Data Sources	
Figure 5. Locations Visited by the ET	
Figure 6. South Gondor WP Inventory Data: WP Functionality	
Figure 7. Waiting at a USAID Water PointFigure 8. WASHCO Operationality Statistics from WP Inventory in Amhara	
Figure 9. WASHCOS with Maintenance Budget in South Gondar Zone of Amhara	
Figure 10. Annual Per Capital Expenditure on Water in Ethiopia	
Figure 11. Hydrogeological Map of Ethiopia	22

## **TABLES**

Table I. Informant Distribution	6
Table 2. Water Point Functionality by Type of Water Scheme	
Table 3. Water Point Functionality by Region	
Table 4. Water Fee Collection by Current Functionality Status	
Table 5. Water Fee Recovery by Current Functionality Status	

## **ACRONYMS**

CKM Communications and Knowledge Management

CLTS Community-Led Total Sanitation

CLTS-H Community-Led Total Sanitation and Hygiene

CNHF Conrad N. Hilton Foundation

CRS Catholic Relief Services

E. coli Escherichia coli

EECMY- Ethiopian Evangelical Church Mekane Yesus—Development and Social Services

DASSC Commission

EKHC Ethiopian Kale Hiwot Church

ET Evaluation Team

FH Food for the Hungry

GOE Government of Ethiopia

HEW Health Extension Worker

HH Household

IP Implementing Partner

JMP Joint Monitoring Programme
LI Lifewater International
LWI Living Water International
LPCD Liters Per Capita Per Day
MPN Most Probable Number

MWA-EP Millennium Water Alliance-Ethiopia Program

NGO Non-Governmental Organizations

PHAST Participatory Hygiene and Sanitation Transformation

REST Relief Society of Tigray

SI Social Impact

SNNPR Southern Nations, Nationalities, and People's Region

WASH Water, Sanitation, and Hygiene

WASHCO Community Water Management Approach

WHO World Health Organization

WP Water Point WV World Vision

YHYH Your Health is in Your Hands Activity

## **EXECUTIVE SUMMARY**

#### **PURPOSE AND OVERVIEW**

Despite of decades of efforts to improve water, sanitation, and hygiene (WASH) in Ethiopia, its key WASH indicators remain some of the lowest in the world. As of 2015, only 30 percent of the rural Ethiopian population had access to water that meets its basic needs; 4 percent used improved, non-shared sanitation; and 99 percent lacked any handwashing facility. With well over 14,000 children under 5 dying from diarrheal disease annually in Ethiopia, it is imperative that WASH development activities are effective, efficient, and have long-lasting impacts. As in other sub-Saharan African countries, sustainability has been a challenge in Ethiopia. For example, a 2010/2011 national WASH inventory rated 25 percent of water points as non-functional. This reflects growing, though limited, evidence across the sector of high rates of water point failure, sometimes just a few years after construction. The consequences are wasted money and time, disappointed communities, and dangerous health conditions.

USAID is committed to identifying sustainable approaches to WASH to avoid such pitfalls and ensure the long-term impact of its global WASH activities. By understanding the extent to which past project outcomes have been sustained and the factors that drove these outcomes, USAID hopes to learn lessons that can inform the design and implementation of future projects. This report presents findings from the third in a series of six ex-post evaluations designed to learn from completed USAID-funded WASH activities. The subject of this evaluation—the Millennium Water Alliance-Ethiopia Program (MWA-EP)—provides an opportunity to learn about the long-term outcomes related to rural water point construction and rehabilitation, community management of those water points, as well as participatory sanitation and hygiene education and construction activities.

The Millennium Water Alliance (MWA) implemented MWA-EP in 24 rural woredas (districts) in Ethiopia between March 2004 and December 2009 with a budget of \$4,677,670 from USAID and a \$2,382,972 cost-share from MWA. A consortium comprised of eight MWA implementing partners (IPs) carried out the activity. The MWA consortium built and rehabilitated water points (WPs) and trained community-level water, sanitation, and hygiene committees (WASHCOs) to manage each of the WPs. The consortium also conducted hygiene and sanitation education, primarily using a participatory hygiene and sanitation transformation (PHAST) approach, and it supported the construction of household (both improved and unimproved) and public latrines.

## **SCOPE**

The evaluation answered six key questions:

- I. **Water access:** What is the level of service at water schemes completed by MWA-EP more than seven years after activity?
- 2. Water use: To what extent are community members using the water?
- 3. Water point management: How have water schemes been maintained since MWA-EP?

http://www.improveinternational.org/2012/10/25/sad-stats/

USAID.GOV

<sup>&</sup>lt;sup>1</sup> WHO/UNICEF. 2017. Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines. Basic water access is defined as drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing.

<sup>&</sup>lt;sup>2</sup> WHO. 2016. Global Health Observatory. <a href="http://apps.who.int/gho/data/view.main.ghe1002015-ETH?lang=en">http://apps.who.int/gho/data/view.main.ghe1002015-ETH?lang=en</a>

<sup>&</sup>lt;sup>3</sup> Ministry of Water and Energy, Government of Ethiopia. April 2013. *Monitoring Water Supplies and Sanitation in Ethiopia*. Presentation by Tamene Hailu Debela. <a href="https://www.slideshare.net/ircuser/2-hailu-nwi-kpi-msf2">https://www.slideshare.net/ircuser/2-hailu-nwi-kpi-msf2</a>

<sup>&</sup>lt;sup>4</sup> Improve International. 2012. Statistics on Water Point Failures webpage:

- 4. **Household latrine, handwashing facility use:** To what extent are household-level and shared community latrines and handwashing facilities supported by the activity still functional, adequately maintained, and used?
- 5. **Public latrine management:** What systems and financial mechanisms have communities used over time to maintain MWA-EP-supported public sanitation facilities and sustain outcomes?
- 6. **Why?** For each type of water and sanitation intervention, which factors contributed to or impaired long-term sustainability?

#### **DESIGN**

The evaluation used a mixed-methods design that included: 64 qualitative individual and group interviews; structured observations of 13 WPs and 15 latrines; water quality tests of 10 WPs; and a review of secondary data. This review included an inventory of water point data in South Gondar Zone, Amhara, and latrine and water point data from woreda health and water offices. The evaluation team (ET) conducted data collection over a four-week period in October and November 2017, in seven of the activity's 24 woredas. The seven were purposively selected in Amhara Region and Southern Nations, Nationalities, and People's Region (SNNPR). The ET also conducted IP interviews and meetings with USAID in Addis Ababa. Prior to fieldwork, the ET conducted a desk review of both MWA-EP activity documentation and relevant WASH literature.

#### **KEY FINDINGS**

#### WATER POINTS: CURRENT STATUS AND USE

The ET examined several aspects of the water points, including: basic functionality; quantity of water and use; and water quality, accessibility, and reliability.<sup>5</sup>

Most WPs visited had significant problems with basic functionality. Concerns about functionality arose during interviews and from direct observations. Only five of the 13 visited WPs were fully functional during ET observation. Three were not functioning at all. A secondary dataset representing 4,352 water points in the Amhara region showed that only 44 percent of MWA-EP-established water points functioned as of 2016. WPs constructed during the same period by other implementers/organizations functioned at a rate of 53 percent, implying that the MWA-EP water points may be underperforming compared to other rural water infrastructure in the same area.

WPs appeared to be well used, and most produced sufficient quantities of water, yet most people relied on multiple sources. Community members used MWA-EP water points daily, when functional, particularly for drinking water. Measured flow rates at six of nine visited WPs could theoretically provide sufficient water for domestic uses for their intended communities. In spite of this, many households relied on other water sources in addition to the MWA-EP water points to meet all their needs. Little is known, however, about why people used multiple sources or how MWA-EP planned for multiple uses of water.

Most WPs failed to meet water quality standards. Despite people's beliefs that the MWA-EP water points served as a clean drinking water source, most were not tested regularly, and the majority (seven out of 10) were contaminated by Escherichia coli (E. coli) and no longer provided safe water.

<sup>&</sup>lt;sup>5</sup> Definitions: Basic water point functionality assessed if a WP produced water at the time of visit. Water quantity refers to the USAID standard of 20L/person/day of water. Water quality refers the water supply being free of contamination (e.g. E. coli) and chemicals, (e.g. fluoride, and arsenic). Water point accessibility refers to USAID's definition, that water collection should take no more than 30-minutes round-trip. Water point reliability refers to USAID's common indicator HL.8.1-3, which requires year-round water point access without regular supply rationing or seasonal failure. Water point use refers to who is/is not using the WP and to what extent

Wait times at many WPs threatened accessibility. Respondents often reported wait times of more than 30 minutes, and WP observations confirmed crowding (averaging 10 containers/WP) and fill times (averaging 2.5 minutes/container) that put wait times at or around the 30-minute standard. With added travel time, water collection is not possible within a 30-minute standard in most activity areas visited.

**Reliability was a concern, but primarily for mechanical rather than seasonality reasons.** While WASHCOs made many small repairs to the WPs, typically taking only a couple of weeks to complete, at the time of visit, many major repairs that affected functionality had not been completed due to a lack of funding. Seasonal fluctuations in water availability occurred in only a few of the sites visited.

#### SANITATION AND HANDWASHING: CURRENT STATUS AND USE

Most households have replaced latrines as needed, but usage appears inconsistent, and users have not progressed up the sanitation ladder. Based on interviews and direct observations, most people who gained access to sanitation under MWA-EP have continued to replace their latrines when they fill. However, many of the original latrines still in use and their replacements were not well maintained, resulting in a lack of privacy and potential safety concerns, both factors that discourage use. As most of the observed latrines featured an "unimproved" design, it appears that, despite replacement, users have not progressed up the sanitation ladder and upgraded to better latrines.

Though latrine owners widely reported using their latrines, Health Extension Workers (HEWs) indicated that latrine usage is likely not as high as people indicate, and the observation data support this. Despite education on the importance of latrines, usage lags behind latrine construction. Though signs indicate that latrine coverage rates have been sustained, more work is still needed to change norms around usage.

**No public latrines remain functional.** None of the MWA-EP–supported public latrines are functional today. People dismantled them for firewood, indicating that the community's short-term demand for firewood outstripped perceived benefits of public latrines.

**People likely overstate the extent of handwashing.** Though most latrine owners reported washing their hands regularly, observation data and interviews with HEWs suggest this is an overstatement. None of the observations revealed handwashing stations or other signs of handwashing, and the HEWs noted significant challenges convincing people to wash their hands regularly.

## **DISCUSSION: FACTORS AFFECTING SUSTAINABILITY**

Myriad factors were found to influence long-term sustainability of outcomes described above, including managerial, financial, institutional, environmental, land tenure, and socio-behavioral factors.

Managerial Factors. To support the sustainability of WPs, MWA-EP worked to build community buyin and establish community management structures (WASHCOs) consistent with the Government of Ethiopia's (GOE) approach to rural water supply. Despite these efforts and trainings, WASHCOs struggled to effectively manage their WPs. Maintenance and repairs posed significant challenges. In particular, WASHCOs have struggled to generate sufficient funds to cover maintenance and repair costs. This finding is in line with prior studies that have found that community management of infrastructure is difficult to sustain in the long term. Secondary data from an Amhara WP inventory suggest that MWA-EP-supported WASHCOs underperform compared to their peers, despite more of

\_

<sup>&</sup>lt;sup>6</sup> Peterson, A. and M. Kremer. 2007. "What Works in Fighting Diarrheal Diseases in Developing Countries? A Critical Review." *The World Bank Research Observer* 22(1), 1-24. <a href="http://www.jstor.org/stable/40282334">http://www.jstor.org/stable/40282334</a> and Lockwood, H. and J. Butterworth 2016. Global Study on Sustainable Rural Water Service Delivery Models: Country Brief Ethiopia. World Bank Report.

them having received management training. Although information on the MWA-EP training efforts is not available, evaluation findings suggest that MWA-EP training was insufficient to ensure sustainability.

For the public latrines, no information is known about the intended management or financial structures meant to maintain the latrines. Based on the finding that none of the public latrines remain, the management systems put in place were not successful.

**Financial Factors.** The inability of most WASHCOs to collect sufficient funds to cover WPs' life cycle costs proved to be detrimental to their functionality and sustainability. Notable differences in fee collection existed at the regional and woreda levels. WASHCOs Amhara were significantly less successful in fee collection than those in SNNPR. The likely reasons for these difficulties, and for the variations across regions include: poor management by the WASHCOs, resistance to payment by users, inability of users to pay, prior custom of paying for water, and availability of alternative surface and groundwater sources in the area.

The limited progress on construction or improvement of latrines at the household level is connected to both lack of finances and low prioritization of sanitation compared to other financial demands. Findings suggest that financial constraints also impact handwashing practices, particularly in water-scarce areas. Interviews suggest that when water is scarce—due to absolute or economic scarcity—people prioritize other water uses over handwashing.

Institutional Factors. MWA-EP did not pay sufficient time or attention to establishing institutional support for WASHCOs from government offices at all levels, which significantly affected performance. For example, WASHCOs reported a lack of post-project training and limited water quality testing. A significant issue is lack of clarity surrounding the roles and responsibilities of government actors in support of the WPs. For example, interviews uncovered widely varying reports regarding who is responsible for key supporting activities such as WP repairs and water quality testing, even among individuals within the same entity. This confusion around roles and responsibilities, coupled with lack of support, exacerbated management and financial challenges at the WASHCO level, hindering long-term sustainability.

In contrast to rural water supply provision, institutional roles and responsibilities for hygiene and sanitation at various government levels were well established, with all respondents agreeing that hygiene and sanitation promotion fell within the purview of the health offices and the HEWs. Though their role is clear, the health offices and HEWs face challenges affecting the delivery of training and other support services, including: insufficient staff to cover their zones, difficulty in accessing remote communities, and competing outreach priorities. For example, among the many health promotion topics in their purview, the government prioritizes other health topics over the promotion of sanitation, hand hygiene, and water safety.

**Environmental Factors.** Although environmental factors remain beyond the direct control of the activity (or the government), they can be planned for and anticipated in activity design. Respondents noted two key environmental factors relevant to the long-term success of the WPs: climatic concerns and hydrogeological water potential. The evaluation results suggest that the IPs effectively addressed these concerns by testing water availability and altering WP designs in response to the findings. This is likely reflected in the lack of significant seasonal reliability issues or the drying up of wells.

Environmental factors may also play a role in fee collection and in hygiene and sanitation. Fee collection may be more difficult in areas where water is plentiful and free. In water scarce activity areas, people prioritize other uses for water over hygiene and sanitation.

**Land Tenure Factors.** Land tenure concerns did not receive significant attention during implementation but posed a challenge to post-implementation sustainability. Land tenure issues arose for MWA-EP in

three areas: I) community conflicts regarding selection and compensation of landowners where community WPs were built; 2) lack of incentives for both tenants and landlords of rental properties to invest in water and sanitation infrastructure; and 3) rights of landowners to access water resources on their property.

**Social/Behavioral Factors.** The 2008 final evaluation of MWA-EP found that the approaches to behavior change varied significantly among IPs and that the approaches were poorly defined and coordinated. To improve sanitation and hygiene behavior change outcomes, respondents suggested increasing follow-up and support after the end of the intervention as well as persistent messaging to increase uptake, a suggestion that has some support in the literature. To be sustainable, this role would have to be taken up by community or government actors.

## **KEY IMPLICATIONS AND RECOMMENDATIONS**

- I. Position government entities to play a stronger role in sustained maintenance and oversight. To ensure stronger institutional support, USAID should assist the government to clarify the roles and responsibilities for government support of the WPs/WASHCOs and to ease financial and logistical constraints faced by government offices in providing support.
- 2. Examine alternative rural water approaches to improve upon the community management model. Both the literature and this evaluation found significant barriers to the sustainability of community-managed rural WASH infrastructure, which suggests this approach may not be the most effective. Before implementing additional community-managed rural water infrastructure activities, USAID should examine potential models, their effectiveness, and sustainability.
- 3. Account for life cycle costs when planning for water infrastructure and tariff setting. All entities involved in operations, maintenance, and repair need to have sufficient resources to fulfill those roles. In addition to positioning government entities to fulfill their role in supporting life cycle costs (Recommendation #I), WASHCOs should be trained to budget and set tariffs based on the full costs of WP maintenance, repair, and replacement.
- 4. Assess the suite of water needs and sources when designing new water access projects. Understanding and planning for the full suite of community water needs will help ensure new activities can be designed to provide water for priority uses.
- 5. Seek stronger, more consistent alternatives to simple education-based behavior change approaches in areas with poor sanitation and hygiene norms. The lack of latrine use and handwashing indicates the varied, PHAST-based approach of MWA-EP was not sufficient to achieve true behavior change. Other approaches may be more successful and should be assessed.
- 6. Improve people's understanding and appreciation of water quality. In future activities, USAID and IPs should ensure that community education activities address the importance of water quality—both visible and invisible—and potential sources of contamination. They should also equip communities with strategies to measure and mitigate contamination at both the source and point of use.
- 7. Address land tenure issues during activity design and throughout implementation. Taking an intentional approach to land tenure, such as having a well-defined action plan for site placement, compensation and mediating potential conflicts, should become standard practice.

\_

<sup>&</sup>lt;sup>7</sup> Wantland, D., B. Bewick, and T. Palermo. 2009. (Ed). Ritterband, L. "Periodic Prompts and Reminders in Health Promotion and Health Behavior Interventions: Systematic Review." *Journal of Medical Internet Research*, 11(2). *and* Ory, M., M. Smith, N. Mier, and M. Wernicke. 2010. "The Science of Sustaining Health Behavior Change: The Health Maintenance Consortium." *American Journal of Health Behavior*, 34(6), 647-659.

## INTRODUCTION

Despite of decades of efforts to improve water, sanitation, and hygiene (WASH) in Ethiopia, its key WASH indicators remain some of the lowest in the world. As of 2015, only 30 percent of the rural Ethiopian population had access to water that meets its basic needs; 4 percent used improved, non-shared sanitation; and 99 percent lacked any handwashing facility.8 With well over 14,000 children under 5 dying from diarrheal disease annually in Ethiopia,9 it is imperative that WASH development activities are effective, efficient, and have long-lasting impacts. As in other sub-Saharan African countries, sustainability has been a challenge in Ethiopia. For example, a 2010/2011 national WASH inventory rated 25 percent of water points as non-functional.10 This reflects growing, though limited, evidence across the sector of high rates of water point failure, sometimes just a few years after construction.11 The consequences are wasted money and time, disappointed communities, and dangerous health conditions.

USAID is committed to identifying sustainable approaches to WASH to avoid such pitfalls and ensure the long-term impact of its global WASH activities. By understanding the extent to which past project outcomes have been sustained and the factors that drove these outcomes, USAID hopes to learn lessons that can inform the design and implementation of future projects. This report presents findings from the third in a series of six ex-post evaluations designed to learn from completed USAID-funded WASH activities. The subject of this evaluation—the Millennium Water Alliance-Ethiopia Program (MWA-EP)—provides an opportunity to learn about the long-term outcomes related to rural water point construction and rehabilitation, community management of those water points, as well as participatory sanitation and hygiene education and construction activities.

Key intended users of evaluation findings are USAID, other donors, Millennium Water Alliance (MWA) and its implementing partners (IPs), and WASH implementers in Ethiopia and other countries. Findings will inform and empower the Government of Ethiopia (GOE) and other host-country governments to hold donors and IPs to higher standards of implementation to ensure investments are long-lasting. Findings from this and future evaluations will also assist these intended users in determining areas for improvement in activity selection, design, implementation, monitoring and evaluation to improved accountability to stakeholders and enhance long-term sustainability.

## **OVERVIEW OF ACTIVITY AND BUDGET**

In 2002, only 12 percent of Ethiopia's rural population had access to an improved water source, and seven percent had access to adequate sanitation facilities. Water and sanitation-related diseases, particularly diarrhea, are the number two cause of death in Ethiopia followed by malaria and HIV/AIDS. Schools suffered from a lack of basic sanitation, and girls were frequently absent due to a lack of sanitation or due to household (HH) chores related to fetching water at a great distance from their homes. According to the MWA-EP's baseline survey, completed in 2006, 76 percent of families in

<sup>&</sup>lt;sup>8</sup> WHO/UNICEF. 2017. Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines. Basic water access is defined as drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing.

<sup>&</sup>lt;sup>9</sup> WHO. 2016. Global Health Observatory. <a href="http://apps.who.int/gho/data/view.main.ghe1002015-ETH?lang=en">http://apps.who.int/gho/data/view.main.ghe1002015-ETH?lang=en</a>
<a href="https://apps.who.int/gho/data/view.main.ghe1002015-ETH?lang=en">https://apps.who.int/gho/data/view.main.ghe1002015-ETH?lang=en</a>
<a href="https://apps.who.int/gho/data/view.ma

<sup>&</sup>lt;sup>11</sup> Improve International. 2012. Statistics on Water Point Failures webpage: http://www.improveinternational.org/2012/10/25/sad-stats/

<sup>&</sup>lt;sup>12</sup> UNICEF. 2003. The State of the World's Children.

<sup>&</sup>lt;sup>13</sup> Centers for Disease Control and Prevention. 2018. Global Health-Ethiopia. https://www.cdc.gov/globalhealth/countries/ethiopia/

intervention areas had no access to an improved water source for daily household consumption. Women and girls were spending on average 57 minutes per day collecting water for their HHs.

To address this situation, MWA implemented MWA-EP in 24 rural woredas (districts) in Ethiopia between March 2004 and December 2009 with a total budget of approximately \$7 million, including \$4,677,670 from USAID and \$2,382,972 from MWA cost-share. A consortium comprised of eight MWA IPs implemented the activity—CARE, Catholic Relief Services (CRS), Food for the Hungry (FH), Lifewater International (LI), Living Water International (LWI), Water Partners International (subsequently renamed Water.org), Hope 2020, and World Vision (WV)—along with local subcontracting non-governmental organizations (NGOs) Relief Society of Tigray (REST), Ethiopian Kale Hiwot Church (EKHC), Water Action, and Ethiopian Evangelical Church Mekane Yesus-Development and Social Services Commission (EECMY-DASSC). Though funding varied by IP both in total amount and duration, on average, each IP received approximately \$900,000 in funding.

The objectives of the MWA-EP activity are shown in **Figure 1. MWA-EP Objectives** below.

Figure 1. MWA-EP Objectives

- I) Increase the level of access to sustainable, safe water and sanitation services among poor and vulnerable populations in rural and peri-urban areas
- 2) Decrease the prevalence of water and sanitation-related diseases, increasing time available for economic development, education, etc.

# **MWA-EP** Objectives

- 3) Promote integrated water (resources) management at the local level with a focus on maintaining the quantity and quality of drinking water
- 4) Develop an efficient, effective, and replicable partnership model for service delivery and advocacy

The IPs addressed water access issues through constructing and rehabilitating water supply schemes across intervention areas. MWA partners created community-based WASH committees (WASHCOs) to manage each of the water points. 14 WASHCOs were provided training on how to manage the water schemes as well as in basic maintenance and repairs.

The consortium also supported the construction of HH pit latrines, public latrines, and sanitation and handwashing facilities at schools. In most cases, however, the precise approaches taken by the IPs were not well documented. Each IP took a different approach to the support of HH latrine construction, with some IPs using demonstration latrines to encourage other HHs to construct their own while others relied on primarily on the participatory hygiene and sanitation transformation (PHAST) methodology<sup>15</sup> for encouraging hygiene and sanitation adoption. It is not clear, however, whether any of the IPs directly assisted in or subsidized the construction/installation of the latrines or handwashing facilities. Due to

\_

<sup>&</sup>lt;sup>14</sup> One exception to this was in Ginchi Town, Dendi Woreda, Oromia, where Water.org and partner Water Action introduced a new financial management model by contracting out water points to private operators.

<sup>&</sup>lt;sup>15</sup> According to the World Health Organization's "Participatory Hygiene and Sanitation Transformation," PHAST is an adaptation of the self-esteem, associative strengths, resourcefulness, action-planning and responsibility methodology of participatory learning, which builds on people's innate ability to address and resolve their own problems. It aims to empower communities to manage their water and to control sanitation-related diseases, and it does so by promoting health awareness and understanding which, in turn, lead to environmental and behavioral improvements.

the lack of information available on the specific approaches, this report refers to all latrines and handwashing facilities as having been "supported" by MWA-EP, a term that likely means different types of support from different IPs.

Though IPs primarily used the PHAST methodology, according to the final evaluation in 2008, the specific approaches used within that (involvement of different stakeholders, reliance on different entities/individuals for education and sanitization, etc.) varied by IP. In the final year of implementation, WV and CRS began to use community-led sanitation (CLTS) to trigger behavior change. IPs working in schools formed school WASH Clubs to promote latrine cleanliness and handwashing stations equipped with soap or ash. According to activity reports and monitoring data, MWA-EP accomplished several WASH outcomes as shown in **Figure 2. MWA-EP's Achievements** below. <sup>16</sup>

Figure 2. MWA-EP's Achievements

Water	<ul> <li>Construction or rehabilitation of 505 safe water supply schemes, <sup>17</sup> providing water access for an estimated 310,093 people</li> <li>Establishment and training of a local management WASHCO for each WP</li> </ul>
Sanitation	<ul> <li>Construction of 91 ventilated improved pit latrines in schools and other institutions, providing sanitation facility access for an estimated 93,379 schoolchildren and community members</li> <li>Support for 31,369 household pit latrines, providing sanitation facility access to an estimated 181,112 people</li> <li>Construction of 182 public latrines, providing sanitation facility access to an estimated 11,000 people</li> </ul>
Hygiene	Provision of hygiene and sanitation education to an estimated 301,550 people

The MWA-EP activity was implemented from 2004–2009 with USAID support, and several follow-on activities have occurred since then. Although MWA did not continue to receive USAID funding, MWA and its consortium continued to implement WASH activities **Figure 3. Timeline of MWA-EP's Main Donors.** 

MWA continued to implement water and sanitation activities in the same regions at the end of the MWA-EP activity. The first extension was implemented through a bridge grant (2010–2012) from the Conrad N. Hilton Foundation (CNHF). Later, additional funding from CNHF and the Coca-Cola Africa Foundation funded WASH activities from 2012–2014, and then CNHF funded activities between 2014–2017. MWA is in the process of designing and finalizing a new activity, since its most recent activity concluded in 2017. The most recent CNHF-funded activity (2014–2017) added additional goals to its programming, including increasing access to WASH in institutions (schools and health care facilities) and seeking to strengthen capacity of national and local governments, community-based organizations, and

3 | MWA-EP EX-POST EVALUATION

<sup>&</sup>lt;sup>16</sup> The programmatic approaches evaluated from the MWA-EP 2004-2009 activity do not necessarily represent current approaches of MWA and its implementing partners. Lessons learned have likely led to adaptations in the past nine years.

This included construction of deep boreholes, machine-drilled shallow wells, hand-dug wells, and spot springs and spring development with extensions. It also included rehabilitation of hand-dug wells, springs, and shallow wells.

the private sector to provide sustainable WASH services. At the time of the evaluation team (ET) visit, MWA was in the process of designing its CNHF-funded activities for 2017–2022.

2012-2014 The Coca-Cola Africa 2004-2009 Foundation and CNHF USAID was a major provided further grant donor for MWA money to MWA 2010-2012 2014-2017 MWA continued working CNHF becomes the major through a CNHF bridge donor for the new phase of grant MWA

Figure 3. Timeline of MWA-EP's Main Donors

USAID also continued to fund follow-on activities through different IPs. USAID funded a follow-on activity to MWA-EP that Save the Children implemented called Your Health is in Your Hands (YHYH) from 2009–2013. YHYH operated in the same four regions as MWA-EP with similar objectives to increase access to water and sanitation and promote improved hygiene behavior. YHYH adopted a new sanitation and hygiene approach, CLTS and Hygiene (CLTS-H), and added an emphasis on school sanitation.

Evaluations were conducted of MWA-EP and YHYH. Key findings of these evaluations are summarized in the Inception Report, which is included in **Annex I** and are also used to inform the findings and conclusions of this evaluation.

# **EVALUATION QUESTIONS**

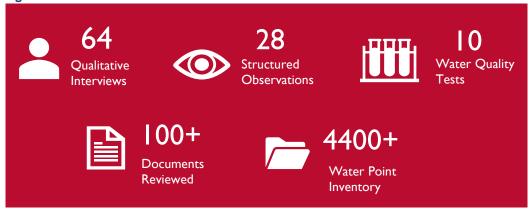
This evaluation addressed six questions as shown below.

- I. **Water access:** What is the level of service at water schemes completed by MWA-EP more than seven years after activity?
- 2. **Water use:** To what extent are community members using the water?
- 3. Water point management: How have water schemes been maintained since MWA-EP?
- 4. **Household latrine, handwashing facility use:** To what extent are household-level and shared community latrines and handwashing facilities supported by the activity still functional, adequately maintained, and used?
- 5. **Public latrine management:** What systems and financial mechanisms have communities used over time to maintain MWA-EP-supported public sanitation facilities and sustain outcomes?
- 6. **Why?** For each type of water and sanitation intervention, which factors contributed to or impaired long-term sustainability?

## **METHODOLOGY**

Overview of Methods. This ex-post performance evaluation used a mixed-methods design that included 64 qualitative individual and group interviews, 28 structured observations, 10 water quality tests of water points, and review of secondary data (see Figure 4. Evaluation Data Sources). Data collection was conducted over a four-week period in October and November 2017 in seven purposively selected former MWA-EP intervention areas in Amhara, Southern Nations, Nationalities, and People's Region (SNNPR), and in Addis Ababa (See Figure 5. Locations Visited by the ET). Prior to fieldwork, the ET conducted a desk review of MWA-EP activity documentation, which included annual, quarterly, and final reports; final evaluations; and other available documentation of the MWA-EP approach, as well as of the relevant WASH literature. The ET developed interview guides and updated them as a group. See Annex III for the detailed data collection schedule and for a list of parties consulted, and Annex I for the Evaluation Design Matrix (Table 7 in the Inception Report), which details the data sources and the interviewee categories that informed the team's answers to each of the evaluation questions.

Figure 4. Data Collection Sources



**Evaluation Team**. A five-person team conducted the evaluation: Team Leader Kari Nelson, Ph.D.; Water CKM Monitoring and Evaluation Specialist Annette Fay; Senior WASH Evaluation Specialist Seifu Tilahun, Ph.D.; WASH Specialist Dessalew Aynalem; and Logistician Mohamed Reshid. Senior Technical Advisor Leslie Greene Hodel provided additional support on evaluation design and data collection tools. Together, team members contributed expertise in evaluation, WASH, local context, and logistical planning. The ET (minus the logistician) split into two groups of two interviewers each—one to Amhara and one to SNNPR—for the duration of the fieldwork.

#### **SAMPLING**

In accordance with criteria guiding the ex-post evaluation series, data collection was limited to locations that did not receive follow-on WASH activities from USAID or other donors. Water CKM reviewed numerous WASH activities that occurred in Ethiopia since 2009 to ensure lack of location overlap. Based on this exercise, the ET excluded two out of 24 woredas with other WASH interventions from the sampling frame.

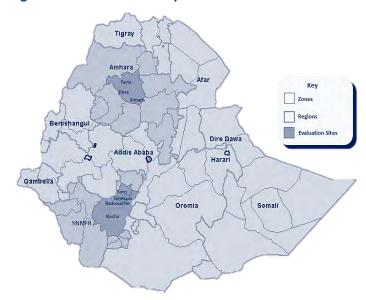
Once potential contamination was accounted for, the ET purposively sampled specific sites to provide diversity of: types of infrastructure, implementing partners, and geographic locations, including locations where USAID is still active in the WASH sector. Under these criteria, the team selected seven woredas in Amhara and SNNPR for data collection (**Figure 5. Locations Visited by the ET**). **Table 1. Informant Distribution** summarizes the final distribution of Interview respondents.

## **DATA COLLECTION METHODS**

Qualitative Interviews. The ET conducted interviews to gain insight about the perceptions of sustainability of the water schemes, sanitation facilities, and behavior change activities that MWA-EP introduced. The ET conducted 64 interviews (see Figure 4. Evaluation Data Sources) representing individuals and organizations (see Annex III for a detailed list).

The ET tailored interview protocols to the informant's role and "causal distance" from MWA-EP activities and the time available for interviewing. The questions not only addressed knowledge and general perceptions, but also probed

Figure 5. Locations Visited by the ET



for specific examples of attitude and behavior change. See Annex II for interview protocols.

**Structured Observations.** The ET conducted a total of 28 structured observations including 13 water schemes and 15 household latrines. The ET employed a tool that assessed flow rate (via stroke tests and fill time measurement for schemes without handpumps) and observed maintenance and repair concerns. Observations at water schemes also included use of wash basins and animal troughs, where these were provided through MWA-EP. The observations assessed signs of use, cleanliness, structural soundness, and signs of handwashing. The ET visited the sites after the end of the rainy season, which likely represents a high point in water availability.

**Water Quality Testing.** To assess the adequacy of the service level, the ET used field-based water quality testing kits to determine whether each water point is currently free from *E. coli* contamination using the Most Probable Number (MPN) method. <sup>18</sup> The team also tested levels of arsenic and fluoride content. In total the ET tested 10 water points. The remaining three WPs visited could not be tested because they were not functional.

Secondary Data. In addition to the activity data described above, the ET reviewed water point inventory data from four woredas in South Gondar Zone of Amhara water office reports in SNNPR, and hygiene and sanitation statistics from the health offices in Farta and Simada, Amhara. The water point inventory in Amhara was conducted by CARE in 2016. It covered all WPs in the zone (not just those supported or constructed by CARE), including 54 MWA-EP water points and 4,352 other water points. The inventory included more than 40 variables regarding the WPs and the managing WASHCOs, from geographic location to date of construction to functionality of the WP to the existence and practices of the WASHCO.

Table 1. Informant Distribution

# INTERVIEWS
16
13
12
11
5
7

<sup>&</sup>lt;sup>18</sup> E. Coli testing used Aquagenx compartment bag tests. Water was collected directly from the WP using sample collection bottles. Details on the testing process are available online: <a href="http://www.aquagenx.com/how-to-use-the-cbt/">http://www.aquagenx.com/how-to-use-the-cbt/</a>

## **QUALITY CHECKS AND ANALYSIS**

During fieldwork, the ET took detailed notes and recorded the interviews (when participants agreed) so that completeness could be verified. The ET conducted weekly quality checks on the data and shared its notes with the management team weekly, which reviewed them for quality and clarity. Furthermore, to ensure quality, the ET submitted a purposive sample of six interviews to be professionally transcribed and translated. Overall coding agreement between the detailed notes and the transcriptions was high, at over 97 percent for each pair. For each interview, this equates to only one or two codes that did not appear in both versions. A review of the mismatches revealed that the discrepancies were minor and largely inconsequential for the analysis.

Following fieldwork, the ET organized the interviews, documents reviewed, structured site observations, and all other data and prepared it for analysis. The ET analyzed the detailed notes using a common codebook in MaxQDA 12 software; the same software was also used to analyze the final, coded dataset. The observation data was entered into Excel. The ET analyzed the data and triangulated all relevant information to ensure conclusions for each evaluation question reflected all available data and documented diverse perspectives. The team circulated all preliminary findings, conclusions, and recommendations internally to ensure the capture of all data and relevant perspectives.

#### **LIMITATIONS**

The ET identified the following challenges and devised mitigation strategies during the evaluation.

Selection Bias and Sample Size. The selection of evaluation sites was not random, but rather based on specific criteria aimed at maximizing what could be learned from the evaluation, as outlined in the methodology. The first stage of sampling targeted just those sites that had not seen a follow-on activity by another donor or outside organization. While this selection criteria helps to isolate just the effects of the MWA-EP activity, given the volume of WASH-related programming in Ethiopia, it also has the possibility of creating a biased sample. Areas that did not receive any further programming could be notably different from those that did, and the differences may or may not be related to the MWA-EP activity. For example, some areas may have received follow-on programming because the MWA-EP WPs failed early on, thus excluding particularly poor performers from the ET's sample. Other areas may have had such poor water access that, despite the MWA-EP efforts, more work was needed and donors stepped in to continue building on the MWA-EP efforts. Given that a single woreda could have over 1,000 WPs (and still not reach full service levels) and that MWA-EP built just 505 WPs across 24 woredas, this is possibility to consider.

The second stage of sampling was also purposive- aimed at maximizing what could be learned in the evaluation. Given the purposive nature of the sampling, the site visits do not form a representative sample. Thus, it is not possible to generalize their current status to the overall activity areas. This was an intentional choice in the evaluation design; one that allowed the team to collect richer and more detailed information about the water schemes, sanitation infrastructure, and behavior change of beneficiaries than would have been feasible had a representative sample been sought. The value of these rich perspectives is captured in the nuanced findings of this report. To mitigate concerns, the evaluation also drew on available secondary data.

The secondary data from the South Gondar Zone of Amhara water point inventory enabled the ET to compare activity areas with the general population. This detailed and extensive dataset provided the team with an opportunity to expand its knowledge about the status of MWA WPs beyond those visited as part of the evaluation and put that status into context. However, it must be noted that the non-MWA WPs in the dataset do not form a formal comparison group, as would be needed in an impact evaluation. Factors such as the selection of MWA sites could influence the comparability of these two groups. For instance, if MWA-EP had focused on supporting the poorest and most vulnerable communities, it might

be unfair to compare such communities to the average. However, no information available to the ET suggests that such criteria were used for site selection in MWA-EP. Rather, most IPs indicate that site selection relied on collaboration with government entities and other NGOs in the area to identify communities that lacked access to a safe water supply. No other specific criteria have been noted that might set MWA-EP sites apart from the "average."

**Self-Selection Bias.** Interviewees may have self-selected by either making themselves available for interviews or in the amount of time they allotted for the interview. Persons with stronger vested interests in the results of the evaluation (either negatively or positively) may have spent more time with the interviewers.

**Recall Bias.** Given that MWA-EP concluded in 2009, significant time has passed since the end of the activity. Thus, the ET faced challenges both in terms of documenting the MWA-EP approach as well as in trying to interview respondents about what they remember of the activity. In terms of documentation, though every effort was made to obtain everything possible, detailed information was not always available and key informants did not always remember specific details. For this reason, particularly around the specific implementation modalities of MWA-EP, the ET was unable to draw definitive conclusions regarding some aspects of the activity. For a list of respondents, see **Annex III.** 

Given the time lag since the end of the activity, interviewees' memories may have become hazy or biased based on other experiences. To mitigate this bias, the team triangulated all data sources to ensure sound conclusions.

**Positive Response Bias.** Social norms can lead individuals to provide what they believe or interpret to be the "correct" response to interviewer questions, regardless of the accuracy of that response. In the case of hygiene and sanitation, it is likely that many respondents know or intuit that the "correct" response is that they use their latrine and wash their hands at all times. This bias could paint an overly positive view of hygiene and sanitation practices. To mitigate this potential bias, in addition to collecting interview data from latrine owners, the ET also met with HEVs and health office officials, as well as conducted direct observations of the latrines, looking for signs of use and handwashing.

Identification of Households that Built a Latrine During the Activity. The ET knew that identifying households that had built a latrine with the support of the activity would be a challenge. Most latrines had not been designed to last as long as the time that has passed since construction with MWA. The ET hoped that households would have learned from their MWA experience and rebuilt their latrines by 2017 to maintain access. Thus, to identify these households, the ET relied on support from the HEWs, community leaders, and WASHCO members who were involved in the activity at the time. Additionally, to help jog people's memories of the activity, the ET referenced significant events happening around the same time as the activity (such as major political events, the construction of the WP, droughts/floods, etc.)—an approach known as anchoring. In the end, the ET identified households that, to the greatest extent possible, were known to have built a latrine with the support of the activity. As noted above, this sample is not a representative sample. But the visits and interviews provide substantial insight into what has happened since the end of the activity and what some of the remaining constraints are around hygiene and sanitation.

Implementation Complexities. MWA-EP was implemented by eight different implementing partners. Per discussions with MWA and the IPs, implementation modalities varied by IP and by different geographic areas (such that the same IP may have used different approaches in different regions of the country). Thus, there is no singular "MWA-EP approach." To fully compare the approaches, the evaluation would have needed eight different treatment arms to fully explore differences among implementers. Even more would have been needed to further disentangle the effects of specific components (such as site selection, community engagement, training design, etc.). Further complicating the ability to measure the effects of implementation modalities are other factors such as geography,

hydrogeology, culture, and socio-economics. For these reasons, discussions of the possible effects of implementation modalities on sustainability are explored, but the ET is unable to definitively measure the effect of specific approaches from each IP.

**Translation Challenges.** SNNPR comprises a diverse set of ethnic and linguistic groups. As such, even within a relatively small geographic area, many different languages are spoken. This reality required that the ET in SNNPR use different translators in different communities, possibly leading to inconsistencies in how different translators approached their task. To mitigate this, the ET worked with each translator to ensure an understanding of the interview protocols and the context of the evaluation. Given that several changeovers happened, however, and given the short time that each translator worked with the team, it is likely that some inconsistencies may have persisted.

## FINDINGS AND CONCLUSIONS

The findings and conclusions are organized across the three thematic areas of the activity: water points, sanitation facilities, and hygiene practices. First, the report summarizes the current status and use of the WPs and then the factors contributing to or limiting their sustainability. This is followed by the current status and use of latrine infrastructure and handwashing facilities and practices. Finally, the factors affecting sustainability of the latrines and handwashing are discussed jointly.

#### **WATER POINTS: CURRENT STATUS AND USE**

To evaluate the current status and use of the WPs, the ET assessed WP functionality, water quantity, quality, accessibility, reliability, and use. This involved in-depth site visits, including direct observations, water quality tests, and interviews with WASHCOs and water users/collectors at 13 different water points, as well as a review of available secondary data.

The following findings distinguish between water schemes, water points, and water taps:

- Water schemes are entire, connected water systems.
- Water point is a specific location on a scheme at which users can collect water.
- A "tap" is used to refer to the individual spigots, pipes, or pump stands from which water is produced.

In the MWA context, the majority of water schemes consisted of a single WP (such as a shallow well with hand pump) while a few had multiple WPs (sometimes kilometers apart) on the same, connected water scheme. As for "taps," while some WPs only had a single tap (such as a handpump producing water through a single pump stand), others (such as gravity fed spot springs) offered multiple spigots/pipes that produced water, allowing multiple users to collect water from the same WP at the same time. This terminology allows the ET to discuss different types of schemes in a consistent manner.

#### **FINDINGS**

**Functionality.** Among 13 visited WPs, five sites were fully functioning, five were partially functioning, and the remaining three were nonfunctional. While some definitions of "functionality" incorporate multiple aspects of WP operation into a single score or rating, to explore these many components in more depth, this evaluation has separated each aspect. Thus, to evaluate basic functionality, the ET used a narrow, point-in-time definition of the ability of the WP to produce water.<sup>19</sup> This basic definition,

<sup>&</sup>lt;sup>19</sup> The ET defined nonfunctional water points as those that were not able to produce any water at the time of visit. The team defined partially functional WPs as those able to provide water from some of the taps/pipes, but not to the extent of the original design. A fully functioning WP produced water from all originally constructed taps at any rate during the time of the visit

which does not account for flow rates or stroke tests (where hand pumps are used), is consistent with other definitions used in Ethiopia, including that of the WP inventory that also serves as evidence in this discussion. <sup>20</sup>

Despite the reduced functionality at "partially functioning" WPs, at least some people still used them to collect water. In all cases of functionality problems, the ET identified the issues as mechanical in nature rather than an issue with the underlying availability of water (i.e., none of the points had "dried up"). **Table 2. Water Point Functionality by Type of Water Scheme** and **Table 3. Water Point Functionality by Region** summarize the functionality of the 13 WPs by type of scheme as well as region. Given the dispersions of these data, it is difficult to draw any conclusions about variations by type of water scheme or region.

Table 2. Water Point Functionality by Type of Water Scheme

TYPE OF WATER SCHEME	FUNCTIONAL	PARTIALLY FUNCTIONING	NON- FUNCTIONAL	TOTAL
Borehole with Tap		1		1,1
Hand Dug Well	I		I	2
Shallow Well	2			2
Spot Spring	1	2	ı	4
Piped System	Í	2	1	4
Total	5	5	3	13

Table 3. Water Point Functionality by Region

REGION	FUNCTIONAL	PARTIALLY FUNCTIONING	NON- FUNCTIONAL	TOTAL
Amhara	3	2	2	7
SNNPR	2	3	1	6
Total	5	5	3	13

Of the 505 WPs constructed, MWA-EP installed 57 cattle troughs and 69 washing basins across the project areas. Only three of the WPs visited had cattle troughs and washing basins. However, the ET found none of the visited components still functioning or being used.

In SNNPR, the ET visited the MWA-built Soro-Sybia water extension scheme; a scheme that includes 27 different water points. From interviews, the ET learned that only one of the scheme's WPs functioned (the one that the team visited), and that the remaining 26 WPs did not function due to problems with

<sup>&</sup>lt;sup>20</sup> The South Gondar Zone water point inventory used a similar definition of functionality as the ET. Though the inventory did not distinguish between partially functional and fully functional WPs, they defined functionality based on whether the water point was able to produce water at the time of visit.

the distribution line. Additionally, in Tembaro, water office officials identified "several" WPs as nonfunctioning but were unable to provide a precise number.

Available secondary data allowed for an analysis of functionality beyond the WPs directly visited. In Amhara, the WP inventory dataset provided substantial data on WP functionality and management—both for WPs constructed through MWA-EP as well as for all other WPs in the South Gondar Zone. This dataset includes the MWA-EP activity woredas of Andabite, Dera, Farta, and Simada, and it includes data on 54 activity WPs and 4,352 non-activity WPs. Based on these data, as depicted in **Figure 6**. **South Gondor WP Inventory Data: WP Functionality,** 44 percent of the MWA-EP WPs in these woredas functioned. This is substantially less than the 68 percent of non-MWA-EP WPs identified as functional.

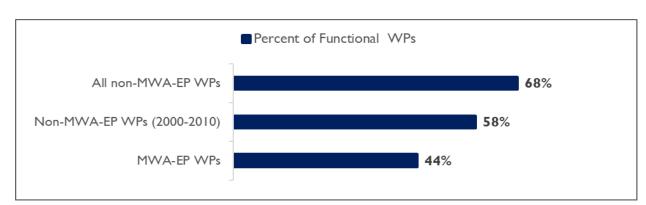


Figure 6. South Gondor WP Inventory Data: WP Functionality

One might expect functionality to vary depending on the age of the WPs, with newer WPs more likely to still be functioning than older WPs like those constructed under the MWA activity. However, an analysis by the age of the WPs yielded similar results—58 percent of WPs in the zone built between 2001–2012 are functional, which is still higher than the 44 percent of MWA WPs that are functional.<sup>21</sup> A logistic regression further supports this finding, indicating that both age of the infrastructure as well as whether the WP was from the MWA-EP activity were statistically significant factors (p<.0001 in both cases).<sup>22</sup> For every additional year of age, the WP is more likely to be nonfunctioning and, controlling for age, MWA WPs were less likely to be functional.

**Quantity.** As outlined in the Inception Report, USAID evaluates the quantity of water as a function of a HH's ability to meet its daily water needs (defined as collecting at least 20L of water/person/day<sup>23</sup>). The first factor to consider in this estimation is the ability of the MWA-EP WPs to produce an adequate quantity of water. Among functional WPs, the average fill time at the water taps for a 20L container was I 52 seconds (equal to a flow rate of 7.8L/minute), with an overall range of 47–660 seconds (standard

II | MWA-EP EX-POST EVALUATION

<sup>&</sup>lt;sup>21</sup> In examining the WP inventory dataset, a few anomalies were noted regarding the accuracy of WP construction dates, with some known entries being misestimated by a few years. For this reason, when attempting to compare WPs from a similar era, a range of 11 years was used rather than the actual 5-year duration of the activity to account for slight errors in dates. Sensitivity analyses reveal that small changes in the included date range do not substantially change the findings, with the range being from 53-58 percent; all well above the MWA functionality rate of 44 percent.

<sup>&</sup>lt;sup>22</sup> Logistic regression findings: MWA-EP Site (0=non-MWA-EP; I=MWA-EP): coefficient=-1.03, z=-3.76, p=.0000; Age of the WP: coefficient=-01, z=6.02, p=.0000.

The GOE's standard has increased to 25 L/person/day, however, 20 L/person/day was the standard in place during MWA-EP implementation and was the standard agreed to in the Inception Report.

deviation=172 seconds)<sup>24</sup>. Overall flow rates were largely sufficient, with all but one water tap taking 160 seconds or less. These flow rates, factored across an entire day, and compared with the number of individuals the WP is serving indicates that, of 9 WPs, 6 had flow rates sufficient to serve the intended population.<sup>25</sup> However, this maximum yield is not necessarily a "safe" yield that could be handled by the underlying aquifer. Measuring the safe yield would require tests of aquifer recovery rates as well, which was not in the scope of this evaluation.<sup>26</sup>

Across the WPs visited, most respondents reported that they collected water from multiple sources and not just the MWA-EP WP to meet their daily needs. The other water sources included natural springs, rivers/streams, and constructed/improved WPs.

**Quality.** Only one of the WASHCOs interviewed indicated that it tested water quality regularly. Of the remainder, just over half said that after the WP was handed over to the WASHCO it was never tested, and the remainder said testing occurred only occasionally. A rating of "occasional" included a range of cases—from only ever having been tested once to situations where it had been tested regularly at some point in time, but that testing had stopped. Though the water sources were not regularly tested, if tests did come back noting a water quality issue, WASHCOs said they would treat the WP using chlorine or other appropriate chemicals.

In most interviews with community members, respondents reported believing that the MWA-EP WP provided water that was safe for drinking and that they never treated their drinking water. Despite this belief, seven of the 10 WPs tested positive for *E. coli* contamination using the World Health Organization (WHO) standard of no detectable *E. coli* (which is the same as the Ethiopian national standard). Of the samples tested, the ET recorded average *E. coli* levels of 12 MPN/100 mL with a range of 3.7 to >100 (the highest rating detectable by the equipment).

In describing why they thought the water from the MWA-EP WPs was safe, users focused on the clarity of the water, the lack of debris, and the fact that the groundwater source was covered so animals could not touch the water source and contaminate it. Many respondents did not seem to understand or be aware of potential invisible contaminants. Though the sources of contamination could not be definitively identified, many of the contaminated WPs appeared to be visibly dirty (trash, debris, etc.), water storage tanks lacked covers, and stagnant water and muddy areas surrounded some of the WPs.

In terms of other potential contaminants, none of the visited WPs tested positive for arsenic (all received a <2 parts per billion rating, the lowest rating possible with the equipment used and less than the 10 parts per billion WHO and Ethiopian national standards). For fluoride, only one site in SNNPR exceeded the WHO and national standard of 1.5mg/L. These findings are consistent with what one would expect given the geography. The highest concentrations of fluoride in groundwater in Ethiopia are known to be in the Rift Valley, which covers parts of SNNPR but is farther from the activity areas in Amhara.<sup>27</sup>

**Accessibility.** As outlined in the Inception Report, USAID defines water accessibility in terms of how long it takes a person to collect water. The international norm, which USAID uses as a guideline, is 30 minutes. This includes transport to and from the water point plus waiting and collection time. The

<sup>&</sup>lt;sup>24</sup> Flow rates were measured using stroke tests for hand pumps or timers for water points that did not have hand pumps.

<sup>&</sup>lt;sup>25</sup> The ET was unable to speak with the WASHCO of 1 visited WP. Thus, data on households served are only available for 9 of 10 partially or fully functioning WPs.

<sup>&</sup>lt;sup>26</sup> International Committee of the Red Cross. 2011. Technical Review: Practical Guidelines for Test Pumping in Water Wells. Geneva, Switzerland. https://shop.icrc.org/icrc/pdf/view/id/904

<sup>&</sup>lt;sup>27</sup> British Geological Survey and Water Aid. 2001. Groundwater Quality: Ethiopia. https://www.bgs.ac.uk/downloads/start.cfm?id=1280

evaluation measured this through interviews as well as by observing crowding and fill times at the WPs. In half of the interviews, respondents reported wait times at the WPs of more than 30 minutes, which would be considered substandard per USAID guidelines. However, the ET noted inconsistencies in how respondents measured and reported time. As one stark example, a water collector insisted (despite probing) that it took three hours to fill a 20 L container from the WP. In this case, the ET's direct observation of the fill time was closer to two minutes for a 20 L container.

In terms of crowding and observed wait times at the WPs, the Lenda WP experienced particularly high demand, with 95 people waiting in line with 210 containers. However, other water points had 10 or fewer containers waiting to be filled at the time of visit. Though every effort was made to visit the WPs during peak times, given the distance and difficulty in accessing some sites, this was not always the case. Thus, it is possible that peak wait times could be higher than what was observed in some cases. Nonetheless, with an average fill time of approximately 2.5 minutes, this would put the remaining water points within or just above the 30-minute expected time frame for collecting water, not taking into account travel times.

Though this had not been an explicit objective of the activity, as another measure of accessibility, the ET found that none of the visited WPs were handicap accessible. The WPs generally required navigation of stairs and, in some cases, navigation over/around barbed wire, difficult terrain, or other obstacles.

**Reliability.** Reliability is assessed in line with USAID's common indicator HL.8.1-3, which requires year-round access without regular supply rationing or regular seasonal failure. As noted above, the ET observed problems with general WP functionality at many water schemes, which influenced overall reliability. Additionally, interviews highlighted the need for both major and minor repairs. Though respondents indicate that most repairs take two weeks or less to take place, in some cases, they can take several months.

In terms of seasonal variations in water flow, the ET visited the sites after the end of the rainy season, rather than during a likely low point in water availability. Thus, the team relied on interviews to estimate seasonal effects. The majority of interviews indicated that water is available consistently across the year at MWA WPs. Where water was not consistently available year-round, most interviewees said that the biggest slowdowns in the flow of water occurred during the dry season (unsurprisingly). The ET noted some variations across regions, with sites in SNNPR slightly more likely to report seasonal fluctuations than in Amhara. In a few cases, however, such as the case of the Lenda WP in SNNPR with high demand, the supply never kept up with demand at any point in the year, mostly due to functionality limitations.

The WP inventory in Amhara included a question asking about whether the WP provided consistent service throughout the year. In response to this question, the MWA-EP WPs rated about the same as non-MWA-EP WPs, with 8 percent and 9 percent of WPs, respectively, experiencing seasonal variations in water availability.

**Use.** Communities use the MWA-EP WPs regularly. According to interviews conducted, at least while the WPs were functional, they were being used daily. As noted above, most users indicate relying on multiple water sources to meet their needs. In discussing what they used the different WPs for, drinking water was the top-rated use for MWA-EP WPs, while for the non-MWA-EP WPs, the uses were evenly split among drinking water, washing, and for animals. Perhaps in line with the high use of MWA-EP WPs for drinking water, most respondents reported believing that the MWA-EP WPs provided safe water for drinking, and that they never treat their drinking water. This, despite the finding that many WPs were contaminated with *E. coli*.

Insufficient data are available to determine the extent to which people used multiple water sources out of convenience (such as using water from a nearby stream for a use they don't believe requires "clean"

water rather than walk farther to an improved WP) or because of insufficient water availability at the MWA-EP WPs to serve all their needs. Renwick et al (2007) suggests that taking into account all people's water needs and potential sources can help ensure that water schemes are not overdrawn, exceeding their potential yield.<sup>28</sup> In the case of MWA-EP, no data are available from activity documentation regarding whether the WPs were intended to provide just drinking water or if they were intended to serve all water needs. However, the inclusion of washing basins and cattle troughs at some WPs suggests more than just drinking water was taken into consideration during design.

In most interviews, respondents indicated that all community members (regardless of wealth, gender, vulnerability status, or other characteristics) were able to use the MWA-EP WP. Respondents noted only a few exceptions for those who have their own WP or those who do not pay their water fees.

## **CONCLUSIONS**

The water access intervention had low sustainability in light of the majority of visited WPs being nonor partially functional. Though some WPs experienced seasonal fluctuations in water availability, functionality problems were the primary contributors to reductions in reliability. Based on secondary data, the MWA-EP WPs may have more functionality problems than other WPs, which raises concerns about this particular activity's approaches.

Despite the functionality issues, water users reported being able to meet their water needs using a combination of the MWA-EP WPs and other water sources.

Figure 7. Waiting at a USAID Water Point



However, it is not clear given available data whether people chose to use multiple water points out of convenience or because the MWA-EP WPs cannot produce sufficient water. However, the maximum yield estimates suggest water sufficiency is not the core reason.

Where the WPs were at least partially functional, the WPs were well used and were typically open to the entire community. Water quality was a concern, however, with the majority of WPs contaminated with *E. coli*. Despite the contamination, most water users believed that the MWA-EP WPs provided clean drinking water. Though most WASHCOs said they would treat their WP if water quality issues were discovered, most WPs were not tested regularly.

The belief that the MWA-EP WPs provided safe drinking water is consistent with the finding that the MWA-EP WPs were used most frequently for drinking water and less for other uses like washing or bathing.

#### WATER POINTS: FACTORS AFFECTING SUSTAINABILITY

<sup>&</sup>lt;sup>28</sup> Renwick, et. al, 2007, "Multiple Use Water Services for the Poor: Assessing the State of Knowledge," Winrock International: Arlington, VA. https://www.winrock.org/wp-content/uploads/2016/02/Multiple-Use-Water-Services-for-the-Poor-Assessing-the-State-of-Knowledge.pdf

#### **FINDINGS**

**Management Factors.** The MWA-EP activity created and trained a WASHCO for each WP to manage the day-to-day operations and maintenance. Though selection processes varied by IP, the WASHCO committees were comprised of volunteer community members. They are typically responsible for water fee collection, regular maintenance, and, to some extent, repairs. Unfortunately, no details were available to the ET regarding the content or duration of the training provided to the WASHCOs.

According to the IPs, building WASHCO and community capacity to support and oversee the WPs was a key activity component intended to support long-term sustainability. This is consistent with Alexander et al (2015), which finds in Ethiopia that higher water scheme functionality scores are associated with having good records, meeting regularly, conducting financial audits, collecting higher monthly fees, designating a paid caretaker, and ensuring the committees have the capacity to perform minor repairs.<sup>29</sup>

To assess WASHCO management, the ET evaluated two key areas: overall WASHCO performance and WP maintenance and repair.

#### WASHCO Performance

All WPs visited had WASHCOs; over half of the water user interviews noted that the WASHCOs could be doing a better job managing the WPs. Users' key criticisms included: a need for improved maintenance of the WPs and a better ability to repair defects.

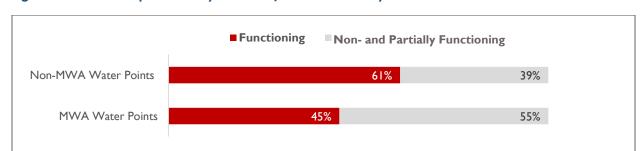


Figure 8. WASHCO Operationality Statistics from WP Inventory in Amhara

Though they use a low threshold for "functionality" of having a full complement of 7 active members, according to the WP inventory in South Gondar Zone of Amhara, a similar percentage of nonfunctioning MWA-EP WPs had a fully functional WASHCO as the non-MWA-EP group (**Figure 8. WASHCO Operationality Statistics from WP Inventory in Amhara**). However, among the functioning WPs, only 45 percent of MWA-EP WPs had a fully functioning WASHCO compared to 61 percent of functioning non-MWA-EP WPs.<sup>30</sup> Interestingly, however, more MWA-EP-supported WASHCOs (70 percent) had received management training than non-MWA-EP WASHCOs (62 percent).

These concerns regarding WASHCO performance surfaced despite the focus IPs placed on WASHCO training and capacity building. Though the ability to generalize from the inventory dataset to all activity

<sup>&</sup>lt;sup>29</sup> Alexander, K., Y. Tesfaye R. Dreibelbis, B. Abaire, and M. Freeman. 2015. "Governance and Functionality of Community Water Schemes in Rural Ethiopia." *International Journal of Public Health*, 60(4), 1.

<sup>&</sup>lt;sup>30</sup> The water point inventory defined a fully functional WASHCO as having seven members who are engaged in supporting the water scheme. A partially functional WASHCO had some active members, but fewer than seven. A nonfunctional WASHCO did not have any active members.

areas is limited, it does raise potential concerns about the content and quality of MWA-EP's WASHCO trainings.

In addition to WASHCO training and capacity building, IPs also emphasized community participation in decision making, which was intended to support both the effective management of the WPs as well as buy-in to the tariffs set for water. Although previous findings have varied, some articles on Ethiopia emphasize the need for strong community participation in decision-making to ensure sustainability.<sup>31</sup> Though details on IPs' specific approaches to engagement under MWA-EP are not available, none of the WASHCOs or water users voiced concerns about the engagement strategy.

### Water Point Maintenance and Repair

For purposes of the evaluation, maintenance was defined as those activities that need to be done on a regular basis to keep the WP functioning (such as tightening bolts, oiling moving parts, keeping the area around the water point clean, tending to any fencing, etc.). The ET divided repairs into two categories: minor (those that did not impair the overall functionality of the WP) and major (those that significantly impaired the functionality of the WP).

The ET identified maintenance issues, followed by minor repair needs, and theft of parts as the most commonly reported problems with the WPs. Theft includes the wooden posts used for fencing, water scheme piping, as well as the mechanical parts of the WPs. Though no respondents indicated that maintenance was never done on their WP, it was most frequently noted to be happening on an "occasional" basis, rather than a regular basis.

Respondents widely noted the need for major and minor repairs. However, minor repairs were far more likely to have been completed than major repairs. In the case of major functionality issues, most problems arose in the last year or so, according to respondents. The number one reason that repairs are not completed, according to respondents, is a lack of money. Additional issues cited (though reported much less frequently than the financial concern) included difficulties obtaining parts and a lack of technical capacity. Respondents noted this latter concern at all levels—water offices, WASHCOs, and among artisans/technicians who were supposed to be able to repair the WPs.

In terms of repair processes, the ET asked WASHCOs what they did when problems arose with their water point. WASHCOs provided inconsistent responses. The primary response when the needed repair went beyond a WASHCO's technical or financial capacity was to contact the woreda water office. However, in some cases, the WASHCOs would first contact an official at the *kebele* (neighborhood) level, who would then contact the woreda office on the WASHCO's behalf. In other cases, WASHCOs indicated that they would contact an NGO and not a government entity, and a few others said that the responsibility was entirely on them to keep the WP functioning, and that they did not receive any support from the government.

Most respondents said that the woreda water offices required them to make a community contribution before the water office would support the repair, which is a part of the GOE's current "self-pay" approach to WASH. To this end, the ET encountered cases in which the community had been unwilling or unable to make the requested contribution and, therefore, their WP had yet to be repaired. Though

<sup>&</sup>lt;sup>31</sup> Tilahun, S., A. Tigabu, T. Tarekegne, M. Addisie, H. Beyene, Z. Alemeyehu, M. Ayele, A. Collick, and T. Steenhuis. 2013. Factors in the Suboptimum Performance of Rural Water Supply Systems in the Ethiopian Highlands. In: Wolde Mekuria. (Ed). Rainwater Management for Resilient Livelihoods in Ethiopia: Proceedings of the Nile Basin Development Challenge Science Meeting, Addis Ababa, 9–10 July 2013. NBDC Technical Report 5. Nairobi, Kenya: International Livestock Research Institute.

some respondents referred to community contributions that could be paid "in-kind," such as through provision of materials or labor, most referred to the required contribution as being financial.

When asked about the typical time needed to get the WP repaired, respondents most commonly indicated that repairs could be made within about two weeks. However, in some cases, particularly if obtaining parts was more difficult, it could take six months or longer.

Though the MWA-EP WASHCOs struggled with maintenance and repairs, it is important to note that community-managed water infrastructure has been shown to be difficult to maintain in the long term.<sup>32</sup> The WP dataset corroborates this finding, which shows that only 63 percent of WPs are currently functional.

**Financial Factors.** As noted above, water fee collection, higher fees, and strong financial management practices have been linked to higher levels of water scheme functionality.<sup>33</sup> Thus, the evaluation examined the WASHCO's ability to collect fees and cover their life cycle costs.

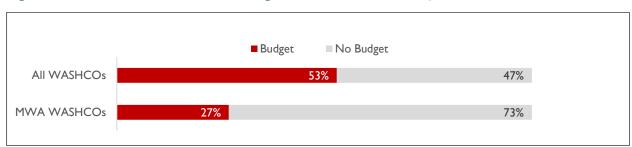


Figure 9. WASHCOS with Maintenance Budget in South Gondar Zone of Amhara

## Fee Collection

The final MWA-EP activity evaluation conducted in 2008 reported that all WASHCOs collected water fees.<sup>34</sup> However, only eight out of 12 of the interviewed MWA-EP-supported WASHCOs reported having ever collected fees, 6 of which were currently collecting fees.<sup>35</sup> Of those who had ever collected fees, seven indicated that they had collected water fees at least up until their water point ceased functioning. If a WP broke down and could not be fixed, in many cases the WASHCO would stop collecting fees since the WP was no longer functioning and providing a service people would pay for. Collecting fees varied by region, with only one WASHCO in SNNPR reporting that it had never collected fees, while nearly half in Amhara had not.

<sup>&</sup>lt;sup>32</sup> Peterson, A. and M. Kremer. 2007. "What Works in Fighting Diarrheal Diseases in Developing Countries? A Critical Review." *The World Bank Research Observer* 22(I), I-24. http://www.jstor.org/stable/40282334 and Lockwood, H. and J. Butterworth 2016. Global Study on Sustainable Rural Water Service Delivery Models: Country Brief Ethiopia. World Bank Report.

<sup>&</sup>lt;sup>33</sup> Alexander, K. et al. 2015.

<sup>&</sup>lt;sup>34</sup> The Mitchell Group. 2008. External Program Evaluation of Cooperative Agreement No. 663-A-00-04-00419-00 Millennium Water Alliance (MWA) Water, Sanitation and Hygiene (WASH) Program in Ethiopia.

<sup>&</sup>lt;sup>35</sup> The ET visited 13 water points. The ET only interviewed 12 MWA-EP-supported WASHCOs because at one of the sites, no WASHCO member was available for an interview. However, one additional non-MWA WASHCO was interviewed as it was only discovered during the interview that the WP the WASHCO supported was not from the activity. Thus, the total number of WASHCO interviews was 13, including 12 supported by MWA-EP and one non-MWA WASHCO.

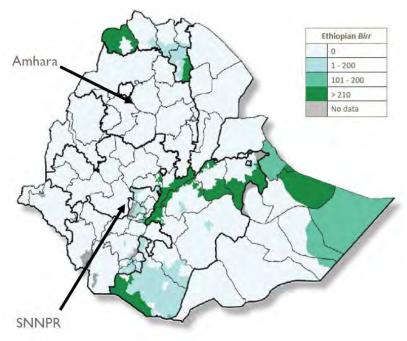
The WP inventory also sheds light on the performance of the MWA-EP WASHCOs in comparison with other WASHCOs in the region. In South Gondar Zone, the data show that though only 53 percent of all WASHCOs had a maintenance budget, even fewer (27 percent) of the MWA WASHCOs did.<sup>36</sup> This finding was consistent even when the ET restricted the dataset just to WPs built around the same time as MWA-EP.

Most WASHCOs that collected fees did so on a monthly or annual basis, though some WASHCOs in SNNPR charged on a per use basis. When WASHCOs collected water fees, the largest number of WPs charged between 10–25 birr/year (US \$.36–\$.91/year). In a couple cases, the fees amounted to more than 50 birr/year. Though the evaluation team was unable to confirm current fee recovery rates for any of the WASHCOs via written records, fee recovery rates reportedly vary significantly. While most WASHCOs report recovering most of the fees owed, the remaining report being able to recover less than half of the fees owed.

How much was charged in water fees varied by region. In some cases in SNNPR, people were willing to pay relatively high prices (more than 50 birr/year in some locations). In Amhara, on the other hand, the fees were generally lower, and in some instances people had not yet even accepted the idea that one should pay for water.

Data from the WP inventory support the above findings regarding variations in water fee collection and provide additional detail on how this varies even among woredas in the same region. The South Gondar Zone dataset show the percentage of WASHCOs that have a maintenance fund varies

Figure 10. Annual Per Capital Expenditure on Water in Ethiopia



significantly across woredas, from 36 percent of WASHCOs in Simada to 63 percent of WASHCOs in Dera. This trend aligns with what the ET saw in site visits; sites in Simada had the greatest difficulty collecting fees while those in Dera collected fees more successfully.

A survey of household expenditures conducted around 2005 paints a stark picture and provides a glimpse into the difficult environment MWA-EP IPs worked in, where very few areas of the country were accustomed to paying for their water. **Figure 10. Annual Per Capital Expenditure on Water in Ethiopia** provides a summary map of the water expenditure data.<sup>37</sup> While some areas of SNNPR—

<sup>&</sup>lt;sup>36</sup> Having a maintenance budget was defined as having a planned/budgeted amount for maintenance needs that was factored into the overall WASHCO budget.

<sup>&</sup>lt;sup>37</sup> Disaster Risk Management and Food Security Sector, MOARD. 2014. An Atlas of Ethiopian Livelihoods: The Livelihoods Integration Unit. Addis Ababa: USAID.

particularly in and around the areas visited in this evaluation—paid for water at this time, none of the areas in Amhara did.

How fees are set, and the rates determined, could also affect whether the WASHCO is able to collect. This, too, varied by region. In SNNPR, respondents primarily indicated that the WASHCOs and/or the government set the fees, while in Amhara, respondents primarily indicated that it was the community that decided what the water fees should be.

## Life cycle Costs

Life cycle costs for a rural water point include the following types of costs:

- I. Cost of capital (loan interest)
- 2. **Capital maintenance expenditure** (nonroutine repair and rehabilitation)
- 3. **Operating expenditure** (routine, ongoing minor operations and maintenance expenditure on labor, fuel, materials, etc.)

The main types of costs that fall in the purview of the WASHCOs are operating expenditures and, at least in part, capital maintenance expenditures. The cost of capital could fall in the purview of WASHCOs if they took out a loan to pay for repairs or other expenses. However, none of the WASHCOs interviewed mentioned this type of expense. Thus, the following paragraphs focus on items 2 and 3—capital maintenance and operating expenditures. "Maintenance," an operating expenditure, refers to regular, ongoing maintenance expenditures such as oiling parts, cleaning mechanisms, etc. The ET split capital maintenance expenditures into "minor repairs" and "major repairs" as previously defined.

Despite the fact that most WASHCOs had collected fees at least at some point, none indicated that the fees collected sufficiently covered all of their costs. Rather, they reported only being able to cover some, if any, of their costs. The most common expenditures they were able to pay for were a guard/caretaker and minor repairs, but not major repairs and regular maintenance.

An analysis of WP functionality by WASHCO fee collection and fee recovery rates sheds light on the connection between water fees and WP functionality. As expected, a positive relationship exists between fee collection and functionality. **Tables 4 and 5** show that functional, and even partially functional, WPs more often had a WASHCO that had collected water fees (at least while the WP was fully functional). Similarly, functional WPs more commonly had a WASHCO that was collecting all, or nearly all, of the water fees owed.

Table 4. Water Fee Collection by Current Functionality Status

	Key	Fee Collection			
	# of Water Points	Not Currently Collecting Fees	Some Fees Collected	All/Nearly All Fees Collected	
nality	Nonfunctional	3			
WP Functionality	Partially Functioning	2	f.	1	
WP	Functional	į.		3	

Table 5. Water Fee Recovery by Current Functionality Status

	Key	Fee Collection			
	# of Water Points	Never Collected	Collected but stopped	Collected while functioning	
nality	Nonfunctional	3			
Functionality	Partially Functioning		2	3	
Š	Functional	i		3	

The challenges in collecting water fees are not unique to MWA-EP WASHCOs. The WP inventory shows that only a small percentage of all WASHCOs in the zone (19 percent) feel they can cover all of their costs with water fees. The MWA-EP WASHCOs had an even lower percentage, however, with only 6 percent believing that the fees they collected could cover all of their costs.

Interviewees noted the biggest challenges in collecting water fees: poverty and/or low ability to pay on the part of users, conflicts among water users, and a general lack of awareness on the part of community members regarding the need to pay for water. In terms of the conflicts between users, this typically involved conflicts between the users who did pay (or were able to pay) and those who did not (or could not). Those who paid would become upset that they had to pay for water while others did not pay yet still used the water.

No WASHCOs provided documentation regarding their actual expenses or expenditures. Though a few estimated how much they thought they would need to collect to cover all of their costs, they could not provide documentation to back up the estimates.

**Institutional Factors.** The GOE currently promotes a strong role for the woreda-level entities to support water infrastructure (typically requiring community contributions). However, this was not the case at the time of MWA-EP activity implementation. Available activity documentation did not clearly state the anticipated role of government structures in the MWA-EP activity other than mentioning that government would participate in various meetings and stakeholder events and HEWs would be involved in the sanitation and hygiene aspects of the activity. The available documents do not explicitly outline a broader role for water offices and the water ministry.

The MWA-EP final evaluation noted government engagement as a weakness of the activity that should be addressed in future programming, which likely explains the limited documentation for the role of government actors. Additionally, the MWA-EP final evaluation found that poor technical support from woreda water offices and a lack of clear ownership rights likely posed a threat to WP sustainability. The evaluation also noted a lack of capacity building of woreda-level structures (both health and water), which could limit long-term effectiveness.<sup>38</sup> The evaluation recommended an increased focus on building

USAID GOV

<sup>&</sup>lt;sup>38</sup> The Mitchell Group. 2008. External Program Evaluation of Cooperative Agreement No. 663-A-00-04-00419-00 Millennium Water Alliance (MWA) Water, Sanitation and Hygiene (WASH) Program in Ethiopia.

capacity of government entities and doing more to link the activity with the relevant governmental support structures.

In addition to the lack of clarity on who is responsible for which repairs to WPs, respondents provided widely varying responses regarding who was responsible for testing water quality, perhaps contributing to the finding that quality was not regularly tested, and in some cases never tested. Interviewees most frequently noted that it was the woreda water office's responsibility. Several interviews also flagged a role for the zonal water office, the woreda health office, and NGOs. In some (though not all) cases, respondents mentioned the woreda water and health offices worked jointly on water quality testing. These inconsistencies existed even among water office officials. A similar lack of clarity affected the ET's planning as it attempted to determine who within the government would best respond to questions on water quality. The ET received differing recommendations of whom to speak to, including the zonal and woreda water offices as well as the health offices. Given the lack of clarity on this responsibility, the ET asked all government entities about water quality testing.

In addition to the lack of clarity regarding roles and responsibilities for repairs and water quality testing, interviews suggest that WASHCOs receive widely varying levels of support and that there is a lack of clarity around what the role of the woreda water offices is in support of the WPs. In speaking with woreda and zonal water offices, respondents said they were responsible for a wide range of support activities, including (in descending order of frequency):

- Technically supporting repairs
- Providing ongoing training to WASHCOs
- Conducting "supervision" or "control"
- Providing training during the start-up of a new WP and WASHCO

However, the WASHCOs had a notably different perspective. Although WASHCOs commonly identified a role for the woreda water offices in supporting repairs, they mentioned providing ongoing training only once. In a few cases, the WASHCOs reported that the woreda water offices played no role in supporting their WP.

No WASHCOs reported any role of the zonal water offices in supporting their WPs (despite government respondents who said otherwise). Adding to the potential confusion, in a number of cases, both WASHCOs and water offices noted a substantive role for NGOs in providing on-going support to WPs.

A lack of clarity is likely part of this disconnect on roles and responsibilities. In addition, the water offices noted several key challenges that limited their ability to adequately provide support to WPs, including (in descending order of frequency):

- Insufficient budgets
- Insufficient transportation (i.e., vehicles) for staff to travel to sites
- General difficulties in accessing all WP sites
- Insufficient staff to cover the entire jurisdiction. A shortage of well-qualified staff at the woreda level to support local infrastructure has also been found previously, with a shortfall in staff of around 40 percent.<sup>39</sup>

The unavailability of spare parts could also be an additional institutional concern; one that was noted in the final evaluation of MWA-EP in 2008.40 Though also a technical factor, given the extensive work by the GoE in improving the supply chain for spare parts, it is included here as an institutional factor.

<sup>&</sup>lt;sup>39</sup> Lockwood, H. and J. Butterworth. 2016.

<sup>40</sup> The Mitchell Group. 2008.

Interviewees for this ex-post evaluation suggest that availability of spare parts continues to be a concern, though much less so than the financial concerns previously discussed. Similarly, the final evaluation noted a lack of technical capacity within the WASHCOs as well as among the water office staff and supporting artisans/repair technicians as a constraint to being able to repair the WPs, but this issue ranked well behind financial concerns by respondents to this evaluation.

**Environmental Factors.** As a part of the interviews, the ET asked IPs and government actors to identify the biggest challenges to WASH sustainability. Of the external factors noted—those donors and implementers cannot directly control—climate-related concerns topped the list. The concerns included: decreased rainfall over time, depletion of groundwater, and droughts and floods.

Although the ET did not have access to pre-activity feasibility or design studies that could provide fuller details, the activity reports do reference decisions made by IPs to maximize water potential and ensure, to the extent possible, that the availability of water would not be a major sustainability concern. For example, some IPs documented having to change locations or modify designs to better fit the environmental context.

Hydrogeology has a potentially important role to play in the sustainability discussion. Areas with lower water potential, lower groundwater recharge rates, and that are drought-prone may have a more difficult time in the long run from a water-availability perspective. Though seasonality was a concern for some visited sites, variations in water service reliability occur more frequently for mechanical reasons than because of water availability.

On a related note, in addition to affecting sustainability overall, hydrogeology could potentially influence some of the regional and woreda-by-woreda differences noted previously regarding WASHCOs' ability to collect fees. Hydrogeology maps (see **Figure 11. Hydrogeological Map of Ethiopia**) of Ethiopia show that while the visited woredas in South Gondar Zone are largely homogeneous and tend to have moderate to high water productivity potential, the SNNPR areas visited are much more variable. Though some areas in SNNPR have a similar hydrogeological profile to those in Amhara, these areas are interspersed with areas of much lower hydrological potential. In areas where water is more readily available, people may be more resistant to the idea of paying for a resource that they could otherwise get for free. In areas of relative scarcity, people may be more accustomed to having to pay for the scarce resource.

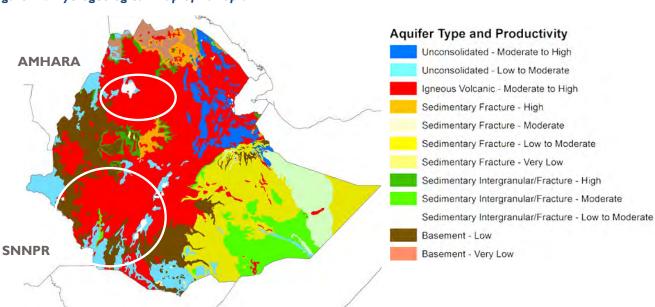


Figure 11. Hydrogeological Map of Ethiopia

**Technical Factors.** Given that more than 8 years has passed since activity completion, it is not surprising that many of the water points have required repairs. However, several respondents (across different types of respondents) noted poor quality construction as a technical factor negatively impacting sustainability in some cases. The evaluation was not designed to assess construction quality and thus the ET could not confirm or refute these assertions. If construction quality were a significant concern, WPs would be expected to fall into disrepair quickly. However, most of the nonfunctioning and partially functioning WPs had fallen into disrepair in the last year or so. Only a couple had fallen into disrepair more than five years ago. With this in mind, the potential challenge of poor construction is noted, but cannot be independently verified or confirmed.

Land Tenure Security. Respondents raised land tenure concerns several times during the interviews as having an effect on sustainability of water, and in some cases sanitation, infrastructure. Interviews highlighted three different types of land tenure concerns: I) the processes and compensation for using the land of rural landowners, particularly farmers, for community water infrastructure; 2) land tenure as it relates to urban/peri-urban settings and the incentives of tenants and landlords to invest in new water and sanitation infrastructure; and 3) water access rights. Activity documentation did not address how IPs dealt with land tenure concerns related to the construction of WASH infrastructure under the activity.

The first type of water-related land tenure issue that arose in the interviews had to do with landowners being willing to give up part of their land for a communal use such as a WP and has links with the process and procedures through which this is handled, including compensation of land owners. A couple of interviewees noted these types of conflicts in the interviews. One farmer, who owned and farmed the land upon which a now defunct WP was constructed, indicated that the WP had led to significant conflicts between him and other community members. Other community members, he said, thought he was getting preferential treatment due to his proximity to the WP, and they did not like that he was chosen to be on the WASHCO and had received several days of per diem for WASHCO training, while other community members had not received this benefit. The conflicts had been so problematic, he said, that they bled over into conflicts over water fees and became a factor that led to the WASHCO's inability to collect water fees and then fix the WP when it broke. Given his experiences, he said that he might allow an organization to rehabilitate the now-defunct WP, but he would refuse to let another WP be constructed elsewhere on his land. Though this issue regarding giving up one's land and the process of compensation arose in the interviews, concerns like his have not been extensively assessed in the literature.

Though MWA-EP implemented most of its activity in rural areas, an IP who had implemented the activity in peri-urban settings noted that encouraging people who rent their homes to invest in water and sanitation infrastructure was a challenge during implementation. For urban WASH, where many of the underserved are not land owners but tenants, the literature focuses on the incentives (or lack thereof) for tenants to invest in WASH infrastructure. Because they do not own the property they are living on, tenants are often unwilling to make costly investments in WASH infrastructure. On the reverse side, landlords are often unwilling to invest in WASH infrastructure improvements. Combined, these issues pose a challenge for improving WASH infrastructure in urban and peri-urban areas.

The third type of WASH-related land tenure issue explores water access rights. The right to access and/or use water resources—both surface and groundwater sources—is often discussed in the literature as being the source of conflicts. Particularly in areas with limited water resources, who is and is not able to gain access can be a troubling issue.<sup>41</sup> This evaluation found very few restrictions regarding

-

<sup>&</sup>lt;sup>41</sup> Mason, N. and P. Newborne. 2013. "Property Rights and Development Briefing: Water Rights and Rural Household Welfare. ODI. and Embaye Z. 2016. The Quest for Standard Tests in Prioritizing Water Use Rights in Ethiopia: Reasonable Use, Beneficial Use or 'Beyond." *Mizan Law Review* 10(1).

who was or was not able to use the WPs constructed through the activity. However, the ability to use one particular MWA–EP constructed WP became an issue in one of the extension systems in SNNPR. The ET discovered that several kilometers of distribution pipes traversed the property of an owner who was unable to use water from the system, as the WP itself was far away. As a result, he damaged the distribution pipe so that he could access the water, causing problems further down the distribution line. In this case, his concern was not directly with the construction of the distribution line on his property, but rather with his ability to access the water that ran through it.

#### **CONCLUSIONS**

Improving water service and delivery is a complex undertaking, involving multiple actors in an environment with geographic, geologic, and historical contexts that all have a role to play in determining sustainability. Within this context, the evaluation found that the functionality problems among MWA-EP WPs were primarily due to managerial, financial, and institutional issues rather than technical issues or seasonal fluctuations in water availability.

The evaluation found that many of the WASHCOs struggled to effectively manage their WPs, with a negative effect on WP functionality. These problems exist despite the efforts of IPs on engaging community members and training the WASHCOs. Ongoing management issues contribute to concerns about the quality and content of the trainings provided, particularly in light of data that may indicate that MWA-EP-supported WASHCOs underperform their peers.

In addition, many WASHCOs experienced difficulties in collecting water fees. Though some were more successful than others, some report never having collected fees at all. Insufficient resources are a significant constraint on WASHCO performance, particularly in terms of being able to pay for maintenance and repairs. But their ability to collect fees is not just the product of their management capacity. The history of water fee payment (or nonpayment) also likely affects WASHCO financial performance as do potential cultural differences and hydrogeology, which determines the availability of both surface and groundwater across the country. In the latter case, in areas where water is plentiful (even if from unimproved sources), people may be less willing to pay for something they can otherwise obtain for free.

Similarly, potential weaknesses in WASHCO performance are also a reflection of the level of support and service the government provides. The evaluation found that this support is lacking. Though some concerns about technical capacity were raised, the bigger concerns were in regard to barriers the water offices face in providing effective support. These barriers include insufficient budgets, transportation options, and staff, and likely contribute to their varied performance in supporting the MWA water points, as does the apparent lack of clarity around roles and responsibilities for everything from supporting repairs to testing water quality.

Additionally, a variety of land tenure issues add to the complexities that WASHCOs must contend with in carrying out their duties, offering an additional stumbling block to ensuring sustainable access to safe water. Despite the challenges posed by land tenure issues in MWA-EP (and to other, similar projects), the WASH literature is only beginning to explore them, leaving significant room for further studies.

#### **LATRINES: CURRENT STATUS AND USE**

## FINDINGS: HOUSEHOLD LATRINES

**Functionality**. In the seven intervention woredas studied in this evaluation, more than 9,000 households constructed traditional pit latrines during the activity according to the final report. However, it was difficult to locate these latrines, and/or their replacements. On several occasions, the ET visited latrines that turned out to not have been supported by the activity. Ultimately, the team visited 15 households that, based on the best information available, built latrines under MWA-EP. Based on

interviews with the latrine owners, most of the latrines had been reconstructed. In two cases, the latrines constructed during the MWA-EP activity appeared to still be functional, though this raises questions about the extent to which they have been used over the last eight to 13 years without overflowing the pits.

Three of the observed latrines had washable slabs that would be considered "improved" based on Joint Monitoring Programme (JMP) definitions. Given MWA-EP's focus on using locally appropriate technologies, this is not surprising. However, it is unclear given activity documentation exactly how many of the activity-supported latrines were constructed with washable (cement) slabs compared to traditional pit latrines with either non-washable (often wood-based) slabs or a patchwork of logs to provide a platform over the pit.

Site visits provided the ET with an in-depth understanding of latrine construction and use. To complement this, woreda-level data provided insight regarding higher level changes in access to latrines, which was one of the objectives of the MWA-EP activity. Overall, interviewees suggest that latrine coverage rates in their communities is high. However, coverage rates varied by region, with respondents in Amhara indicating lower coverage rates than in SNNPR. This finding is consistent with secondary data sources, which also find substantially higher latrine coverage rates in SNNPR than in Amhara.<sup>42</sup> According to secondary data obtained from the Simada and Farta health offices, latrine coverage rates in these woredas are particularly low, at about 33 percent in both woredas. In SNNPR, interviews underlined potential doubt regarding the woreda latrine coverage rates. According to these interviews, because latrine coverage rates are used as a metric for HEW performance, HEWs have an incentive to inflate the numbers and show that they are doing a good job. A verification exercise was said to have been conducted in Tembaro in 2016, which revealed that only 50 percent of the total number of reported latrines actually functioned.

Maintenance. Half of the interviewed HH latrine owners reported they regularly maintain and/or clean their latrines. Only a couple of latrine owners indicated cleaning or maintaining their latrine infrequently, while the remainder said they conducted cleaning and maintenance "as needed." The observation data indicate that most of the latrines (11 out of 15) were kept clean, but larger maintenance concerns existed. Only two of the 15 observed latrines offered full privacy (complete walls and a door) and less than half were safely constructed, without risk of falling or collapse during use.

**Use**. As health officers pointed out, latrine coverage rates do not necessarily equate with latrine use. When asked about latrine use, most latrine owners said they always use their latrine and that all members of their household use it. Only in one case did a latrine owner suggest that latrine use may not be as prevalent as some indicated. This latrine owner said that she built her latrine only because an HEW asked her to do so. The entire community had to build latrines to satisfy the requirements of the implementer. But her household does not actually use it, she said, nor did she believe others in her community used their latrines.

HEWs reported more conservative estimates of how many people actually used their latrines. Responses tended to rate usage as "most of the time" rather than always, like the latrine owners did. One of the HEWs remarked that only around 85 percent of community members use the latrines they built. Community members do not intentionally demolish their latrines, she said, but they do not necessarily replace them when full. And they do not necessarily use the latrine at all times, she said, rather, they use it when it is convenient and go in the open when it is not.

In direct observations of the latrines, the ET noted signs of use for 10 out of 15 latrines. However, this varied by region, with two of six showing signs of use in Amhara compared with eight of 10 in SNNPR.

<sup>&</sup>lt;sup>42</sup> DHS Ethiopia. 2016. Downloaded via STATCompliler.

It is possible that positive response bias is influencing discussions of sanitation. If people know that they are supposed to be using latrines, they are more likely to report that they are using them, even if they are not, or are not using them as frequently as they report. It is for this reason that direct observation and triangulation between data sources is important. In support of this potential bias, two respondents in Amhara reported in their interviews that they use their latrine all the time, but later, while the ET was completing its observation of the latrine, other family members indicated that the latrine was not used at all, which the direct observation confirmed.

#### **FINDINGS: PUBLIC LATRINES**

Lifewater International through EECMY-DASSC introduced public latrines in two woredas: Soro and Limu in the Hadiya Zone of SNNPR. According to interviews with HEWs in these woredas, none of the MWA–supported public latrines are currently functional, or even in existence. Thus, the ET had no opportunity to make direct observations.

In Soro, the public latrines were said to have been destroyed by beneficiaries during the activity period because people wanted to use the construction materials for firewood. The HEW said that destruction of latrines for firewood is consistent with what they see with household latrines, where households in this area often destroy their own latrines for firewood in times of need. She also suggested that the kebele administration should have been more proactive in supporting the public latrines, and that the threat of fines could have scared community members away from destroying this common property.

In Limu, the MWA–supported public latrines fared better, surviving the original activity period. According to the HEW, the community used the latrines for three years and even replaced them when the original ones became full. Interviewees claim that the quality of the construction of the replacement latrines was not as high as the originals. When the latrines were replaced, the community did not reuse the washable slabs from the original latrines because they had not been regularly cleaned and were considered too unsanitary to move. Also, the replacement latrines did not offer enough privacy because the builders skimped on the wood in constructing the walls. Eventually, the community in Limu dismantled the replacement latrines for their wood.

#### **CONCLUSIONS**

#### **Household Latrines**

Based on the interviews and direct observations, it appears as though most of the MWA–EP-supported latrines are being replaced. However, many of the latrines are not being constructed or maintained in a high-quality manner, leaving many with incomplete privacy and potential safety concerns. As most of the observed latrines are of a rudimentary design (not using washable cement slabs), it appears that users have not progressed up the sanitation ladder and upgraded to better latrines as they replaced them.

Although latrine owners widely report using their latrines, there is reason to doubt the extent to which this is actually the case. Despite education on the importance of latrine use—both through MWA-EP as well as through ongoing support from the GOE and the HEWs—it likely lags behind latrine construction. Thus, though signs indicate that latrine coverage rates have improved, more work is still needed to encourage latrine use.

#### **Public Latrines**

None of the MWA–supported public latrines are functional today. Though little is known about the intended management or financial systems to support the public latrines in the long term, those systems appear to have been insufficient to keep the latrines maintained and functioning. In particular, the community's need for firewood seems to have been so high that it outweighed the potential benefits of having the public latrine.

#### HANDWASHING: CURRENT STATUS

#### **FINDINGS**

**Functionality and Maintenance.** At the time of data collection, none of the 15 observed latrines had an installed handwashing facility, although most latrine owners stated in interviews that these were built at the time of latrine construction. In a few cases, when confronted with the absence of handwashing facilities, latrine owners explained they bring water and soap from their homes to wash their hands after using the latrine.

**Use.** When asked how frequently they wash their hands after using the latrine, the majority of latrine owners stated that they either always wash their hands or that they do most of the time. As with latrine use, however, there is some cause to doubt this self-reporting. First, handwashing is likely subject to the same positive response bias that latrine use is. If people know that they are supposed to be washing their hands, they are more likely to report that they are, even if they really are not.

As with latrine use, the HEWs tended to be more conservative in their estimates of how often people wash their hands. Whereas most latrine owners said they always washed their hands, no HEWs thought people washed their hands all the time. Rather, the HEWs were divided in their opinions, with about half saying people washed their hands most of the time and half saying people rarely or never wash their hands.

Despite interviews with the latrine owners largely indicating that they washed their hands always or most of the time, none of the direct observations of latrines revealed evidence of handwashing, such as presence of a water container, water spots on the ground nearby, or availability of soap. In a similar vein, one HEW noted, "...usage is low...rarely [do] they wash their hands. You know that they are not washing their hands when you see the water they put there [the handwashing station] changes to green. We cannot say they are putting in to action what they have learned."

#### **CONCLUSIONS**

Although latrine owners claim to always wash their hands, the absence of handwashing facilities and the lack of observed signs of handwashing at the latrines cast doubt that this is always the case. Interviews with HEWs and the health offices shine additional light on the potential disconnect between what people say they are doing and actual practice. Though education around proper hygiene is ongoing with the support of the GOE and the HEWs, a lack of knowledge and ingrained traditions continue to pose obstacles to good handwashing practices. The reality that people would overstate the extent to which they wash their hands, however, suggests that they are at least aware of the issues. Thus, the gap appears to be in moving people from a base level of awareness to action.

#### LATRINES AND HANDWASHING: FACTORS AFFECTING SUSTAINABILITY

#### **FINDINGS**

**Management and Financial Factors.** For household latrines, though it was not the top-rated concern, respondents noted that financial constraints could be an impediment to constructing latrines. It is also a barrier to improving latrines, which many latrine owners said they would like to do- in terms of location, privacy, or the use of cement over wood. Though primarily related to construction, this constraint can also affect use as some studies suggest that key factors affecting latrine use are: better maintenance, accessibility and privacy, the type of facility, cleanliness, and the age of latrines.<sup>43</sup>

<sup>&</sup>lt;sup>43</sup>Garn, J., G. Sclar, M Freeman, G. Penakalapati, A. Gauthami, T. Kelly, P. Brooks, E. Rehfuess, S. Boisson, K. Medlicott, T. Clasen. 2017. "The Impact of Sanitation Interventions on Latrine Coverage and Latrine Use: A Systematic Review and Meta-Analysis." *International Journal of Hygiene and Environmental Health*, 220(2.B), 329-340.

The available documentation on public latrines does not shed light on the planned management or financial structures. Nor were the HEW interviews able to provide insights on the intentions of the IP. Despite the lack of information, however, whatever mechanisms had been designed appear to have been insufficient to ensure sustainability of the latrines.

In terms of supporting sanitation and hygiene education, some health office respondents noted having insufficient resources to properly educate the communities. In addition, financial and environmental factors overlap in areas where water is scarce and where the costs of water are higher. To pay for water for handwashing, a household would need to value handwashing enough to justify the cost. This is likely a higher hurdle than for those who do not have to pay for extra water. Though decisive evidence on this matter is not available, it was noted as a possibility after the site visits.

**Institutional Factors.** Whereas the roles and responsibilities for supporting the WPs appeared ambiguous, government entities seemed clear about their hygiene and sanitation responsibilities. Here, respondents unanimously reported that hygiene and sanitation matters fell within the purview of the health office, with the primary role being to educate and sensitize the community. The HEWs take primary responsibility for this education and sensitization. However, they are also responsible for educating people on other topics—known as "packages" such as on maternal and child health and immunizations. In some cases, interviewees noted, other packages may be prioritized over hygiene and sanitation, particularly in the face of limited human and financial resources.

**Environmental Factors.** Interviewees noted environmental factors as impacting sustainability of sanitation infrastructure. Some flood prone areas posed a particular challenge for latrine owners, according to interviews. Excess water can cause latrines to fill and make them prone to collapse. Similarly, the soil type in some areas can also make latrines vulnerable to collapse. In other areas, interviewees noted that termites can cause problems with wood-based latrine construction (see below). Finally, challenges in overall access to water can limit its use for hygiene and sanitation purposes.

**Technical Factors.** MWA–EP-supported household-level latrines appear to be technologically appropriate and built from locally available materials. However, the one technical component that has a likely impact on sustainability is the use of wood-based construction in areas where termites are a problem. This poses a risk to the sustainability of the latrines and, potentially, user safety when wooden slabs deteriorate.

**Social/Behavioral Factors.** The final activity evaluation found that MWA-EP had not placed sufficient attention or focus on the hygiene and sanitation aspects of the activity. In particular, the evaluation notes that the behavior change approaches were not fully contextualized to the specific communities until late into implementation (after the baseline data was available in 2006). The evaluation also noted a poorly defined behavior change strategy to guide MWA-EP activities. Rather than basing approaches on a thorough contextual assessment and review of what works, IPs implemented an eclectic array of activities based on their own experiences (but not necessarily the experiences of others).<sup>44</sup>

Interviewees cited a lack of knowledge regarding the benefits and importance of latrine use and handwashing as a core reason why people failed to implement the practices. Though respondents noted this lack of knowledge, all latrine owners reported having received hygiene and sanitation training during the MWA-EP activity. Additionally, the likely positive response bias encountered in interviews suggests that knowledge that they "should" be using latrines and washing their hands exists. However, interviews with health workers suggest that it is not base knowledge that is missing, but rather the next step from knowledge to action that remains a hurdle. Another barrier to behavior change, according to

\_

<sup>&</sup>lt;sup>44</sup> The Mitchell Group, 2008.

interviewees, is tradition. And interviews with HEWs and health office staff suggest that convincing community members to change their practices is difficult. As one HEW explained regarding latrine usage, "It is a practice deep rooted in the tradition of their ancestors. There is a resistance to change what they acquired through the tradition. They say, 'what happened to our parents who did not use latrine?" To better support moving from basic knowledge to action interviewees indicated a desire for more training and sensitization and suggested additional follow-up. Some studies point to the positive effect of longer term messaging and support as a means of supporting the move from basic knowledge to encouraging sustained behavior change.<sup>45</sup>

#### **CONCLUSIONS**

Overall, the roles and responsibilities at the institutional level for supporting household and public hygiene and sanitation are clearer than they are regarding support to the WPs. However, the health office faces its own constraints to delivering effective services. They must cover wide geographic areas with limited staff and funding and are also responsible for delivering education and support on other health topics, some of which are reported to take precedence over WASH topics.

At the household sanitation level, multiple factors influence outcomes, including access to sufficient resources, and environmental challenges like water scarcity and flooding. Water scarcity similarly impacts handwashing practices when households prioritize other water uses over handwashing.

For the public latrines, though nothing is known about the intended management and financial structures put in place to support them, the evidence suggest that these systems did not succeed.

<sup>&</sup>lt;sup>45</sup> Wantland, D., B. Bewick, and T. Palermo. 2009. (Ed). Ritterband, L. "Periodic Prompts and Reminders in Health Promotion and Health Behavior Interventions: Systematic Review." *Journal of Medical Internet Research*, 11(2). *and* Ory, M., M. Smith, N. Mier, and M. Wernicke. 2010. "The Science of Sustaining Health Behavior Change: The Health Maintenance Consortium." *American Journal of Health Behavior*, 34(6), 647-659.

#### RECOMMENDATIONS

I. Support government entities in playing a stronger role in sustained maintenance and oversight. The water points lacked institutional support after the end of the activity, and lack of clarity surrounded the roles and responsibilities of government entities and WASHCOs related to WP maintenance and water quality testing. Additionally, longer-term messaging and support, which should be led by the government rather than donors, might improve the adoption and sustainability of hygiene and sanitation practices. Two critical areas for improvement are needed: clarifying roles and responsibilities and easing constraints to government support.

To better ensure the long-term sustainability of water infrastructure, future programming should help ensure that roles and responsibilities of government agencies are clarified at all levels, from the national level down to the kebele level. Communities also need to be informed of their own roles and responsibilities as well as the expectations they should have for support from relevant government entities so that they can hold those entities responsible. This clarification of roles and responsibilities resides first with the GOE. However, there is space for potential donor support for these efforts, which could take the form of technical assistance for policy reform or capacity-building activities.

Ensuring long-term support, both for WPs and hygiene and sanitation messaging, also requires alleviating barriers that water and health offices face in delivering services. Sufficient budgets, staff, and equipment need to be allocated to ensure proper support. And staff need to have adequate skills and training. As with the clarification of roles, the primary responsibility for ameliorating these challenges belongs to the government. Donors can play a supporting role in terms of backing any necessary policy reforms, encouraging good governance and social accountability, incorporating life cycle costing exercises or building the capacity of government institutions to create a strong enabling environment for WASH.

- 2. Examine alternative rural water approaches to improve upon the community management model. Both the literature and this evaluation find significant barriers to the sustainability of community-managed rural water infrastructure, which suggests this approach is not the most effective. It is outside the scope of this evaluation to evaluate potential alternatives. However, before implementing additional activities similar to MWA-EP and to continue improving on past practices and explore new approaches, USAID should examine all potential models, their effectiveness, and sustainability. Where studies already exist, those findings should be incorporated into new activity plans, and where gaps exist, additional studies/assessments should be conducted. While no perfect solution likely exists, such reflection could help future activities learn from what works and what doesn't.
- 3. Account for life cycle costs when planning for water infrastructure and tariff setting. For water infrastructure to be sustainable, all entities involved in its maintenance and repair need to have sufficient resources to fulfill those roles. The challenges water offices face in covering life cycle costs and carrying out their responsibilities as well as how those challenges could be alleviated are discussed in recommendation #1. For WASHCOs to be able to cover their life cycle costs, these full costs would need to be built into the training they receive and the tariff setting that occurs.

A tension exists between what community members are willing and/or able to pay for water and the actual costs of operating and maintaining a water point. This is evident, in the variations seen in WASHCOs' ability to collect fees in different parts of the country. If fees are set above

people's payment threshold, it could result in refusal to pay, which is a significant sustainability risk factor. In practical terms, it may not be possible for all WASHCOs to cover 100 percent of their costs. To ensure that this possibility is mitigated, IPs should incorporate willingness and ability of local communities to pay and the potential for incorporating programming to address this. For example, educational activities around the value and benefits of clean water could be conducted.

If life cycle costs cannot be fully recovered by the WASHCOs via fees, then some other accommodation is necessary. Adjustments may be needed in what the WASHCOs are expected to support compared to what the government water offices or other structures are expected to support.

- 4. Assess the suite of water needs and sources when designing new water access projects. Project documents do not provide a clear understanding of whether water users were intended to use the MWA WPs for just some water needs (i.e. drinking water) or for all their water needs. However, the inclusion of washing basins and cattle troughs suggests the intention was broader than just drinking water. No available data exist to shed light on the extent that multiple water sources are utilized out of convenience versus necessity. Some studies suggest that clarifying the intended water uses for a water scheme and ensuring that planning accounts for all water uses would benefit long-term sustainability.
- 5. Seek stronger, more consistent alternatives to simple education-based behavior change approaches in areas with poor sanitation and hygiene norms. The lack of latrine use and handwashing indicates the simple and varied approaches to behavior change in MWA-EP were not sufficient to achieve true behavior change. Newer approaches may be more successful. Existing contextual knowledge regarding the strengths and weaknesses of different approaches should be assessed prior to design and implementation.
- 6. Improve people's understanding and appreciation of water quality. The evaluation found that people typically thought that the water from the MWA WPs was clean based on appearance Thus, water users tended to overlook the possibility or importance of microbial contamination. In future activities, USAID and IPs should ensure that community education activities provide specific education and knowledge around the importance of water quality—both visible and invisible—and potential sources of contamination. Future activities should equip communities with strategies to measure and mitigate contamination at both the source and point of use.
- 7. Address land tenure issues during activity design and throughout implementation. Having an intentional approach to land tenure issues starting from program design through implementation should become standard practice. Land tenure issues did not appear to be a primary barrier to sustainability, but they significantly affected the functionality of a few water schemes. Land tenure issues were also a barrier for sanitation infrastructure in some of the periurban areas where the activity worked. The potential impact of land tenure concerns is significant enough to warrant more focused attention in the design and implementation of future WASH activities.





PHOTO CREDIT; KARI NELSOI

## FINAL EVALUATION REPORT ANNEXES

## ETHIOPIA MILLENNIUM WATER ALLIANCE PROGRAM EVALUATION

WASH Ex-Post Evaluation Series – Water Communications and Knowledge Management (CKM) Project

May 9, 2018

## **TABLE OF CONTENTS**

Annex I: Evaluation Inception Report	2
Annex II: Data Collection Tools	36
Annex III: Data Collection Schedule and Parties Consulted	130
Annex IV: Bibliography	133



#### **ANNEX I: EVALUATION INCEPTION REPORT**



Photo credit: CARE International Ethiopia

## INCEPTION REPORT

# ETHIOPIA MILLENNIUM WATER PROGRAM POST PROJECT EVALUATION

WASH Post Project Evaluation Series—Water Communications and Knowledge Management (CKM) Project

September 18, 2017

#### **TABLE OF CONTENTS**

Introduction	I
Background on Post Project Evaluation Series	I
Activity Context	2
Evaluation Design Methodology	6
Evaluation Design Limitations and Risks	25
Utilization Plan	26
Team Composition and Management Plan	27
ANNEXES	
Annex A: Assessment of Site Contamination	33
Annex B: Evaluation Timeline	34
Annex C: Draft Data Collection Instruments	35
Annex D: Works Cited	54

#### **ACRONYMS**

BCC Behavior Change Communication

CARE Cooperative for Assistance and Relief Everywhere

CFU Colony-Forming Unit

CKM Communications and Knowledge Management

CLTS Community-Led Total Sanitation

CLTS-H Community-Led Total Sanitation and Hygiene

CNHF Conrad N. Hilton Foundation
CRS Catholic Relief Services

EECMY-DASSC Ethiopian Evangelical Church Mekane Yesus—Development and Social Services

Commission

EKHC Ethiopian Kale Hiwot Church

FH Food for the Hungry
Gls Group Interviews

GOE Government of Ethiopia

HH Household

IPs Implementing Partners

JMP Joint Monitoring Programme
KII Key Informant Interview
LI Lifewater International
LWI Living Water International
LPCD Liters Per Capita Per Day
M&E Monitoring and Evaluation

MWA-EP Millennium Water Alliance Ethiopia Program

ODF Open Defecation Free

OWNP One WASH National Program

PHAST Participatory Hygiene and Sanitation Transformation

REST Relief Society of Tigray

SI Social Impact

SIT Sustainability Index Tool
STA Senior Technical Advisor

STC YHYH Save the Children Your Health is in Your Hands Activity

TCCAF The Coca-Cola Africa Foundation

VIP Ventilated Improved Pit

WASH Water, Sanitation, and Hygiene

WASHCO Community Water Management Approach

WV World Vision

#### INTRODUCTION

The Water Communications and Knowledge Management (CKM) Project is pleased to present this inception report for the Millennium Water Alliance Ethiopia Program (MWA-EP) Post Project Evaluation. This document clarifies the evaluation purpose and questions, describes the evaluation team composition, presents the team's proposed data collection and data analysis plans, indicates known limitations, and reviews the schedule of deliverables.

#### **BACKGROUND ON POST PROJECT EVALUATION SERIES**

On September 17, 2015, USAID signed a contract with ECODIT for the Bureau for Economic Growth, Education and Environment (USAID/E3) Water Communications and Knowledge Management Project (AID-OAA-TO-15-00046), a five-year, \$15 million task order under the Water and Development IDIQ. Under this contract, ECODIT is implementing knowledge management and communication services in support of the Water and Development Strategy and any follow-on water strategy. The project supports USAID's E3 Water Office and its partners in increasing water program knowledge and data capture; enhancing knowledge creation and knowledge sharing internally and among a wide range of external water sector stakeholders working in the water sector; and improving communication and outreach through diverse stakeholder engagement. As part of Task I.I., Knowledge and Data Capture, ECODIT and its subcontractor Social Impact (SI) are conducting a series of post-project evaluations of USAID water activities (Task I.I.I) to further USAID's understanding of why its completed WASH activities have or have not been sustained. The series of evaluations builds on lessons learned from the development of the Sustainability Index Tool (SIT) and its application in nine countries, including Ethiopia in 2015. The third of these evaluations is an ex-post performance evaluation of the MWA-EP.



Figure 14. Administrative Map of Ethiopia

#### **ACTIVITY CONTEXT**

In the early 2000s, only 12 percent of Ethiopia's rural population had access to an improved water source, and 7 percent had access to adequate sanitation facilities. Water- and sanitation-related diseases, particularly diarrhea, were among the top three causes of death followed by malaria and HIV/AIDS. Government workers suffered in rural settings, as did their ability to perform services for rural communities. Schools suffered from a lack of basic sanitation, and girls were frequently absent due to a lack of sanitation or due to household (HH) chores related to fetching water at a great distance from their home. According to the MWA-EP's Baseline Survey, 76 percent of families in intervention areas had no access to an improved water source for daily household consumption. Women and girls were spending on average 57 minutes to collect water for their households. The majority of the population in these areas practiced subsistence farming. Ethiopia was the second-poorest country in the world in 2000.

To address this situation, the Millennium Water Alliance (MWA) implemented MWA-EP in 24 rural woredas (districts) in Ethiopia between March 2004 and December 2009 with a budget of \$4,677,670 from USAID in addition to a \$2,382,972 cost-share. MWA-EP was implemented by a consortium comprised of eight MWA implementing partners (IPs) —Cooperative for Assistance and Relief Everywhere (CARE), Catholic Relief Services (CRS), Food for the Hungry (FH), Lifewater International (LI), Living Water International (LWI), Water Partners International (subsequently renamed Water.org), Hope 2020, and World Vision (WV)—along with local subcontractor NGOs Relief Society of Tigray (REST), Ethiopian Kale Hiwot Church (EKHC), Water Action, and Ethiopian Evangelical Church Mekane Yesus—Development and Social Services Commission (EECMY-DASSC). Table I below shows the locations served by each IP.

Table 8. Regional and Woreda Distribution of MWA-EP IPs

Region	Woreda	Implementing Partner	Completion Year
Amhara	Achefer	FH	January 2009
	Bure	CRS/Water Action <sup>2</sup>	January 2009
	Dera	WV	January 2009
	Dangila	FH	December 2009
	Jabitehinan	CRS/Water Action	December 2009
	Simada	FH	January 2008
	West Estie	CARE	December 2009
	Farta	CARE	June 2006
Oromia	Tole	Hope 2020	December 2009
	Wonchi	WV	November 2007
	Dendi	Water.org/Water Action	January 2006
Tigray	Weri Leke	Water.org/REST	June 2009
	Adwa	Water.org/REST	August 2005

<sup>&</sup>lt;sup>1</sup> UNICEF. 2003. The State of the World's Children.

USAID.GOV

<sup>&</sup>lt;sup>2</sup> Implemented with USAID funding through the Water and Development Alliance, a partnership between USAID and the Coca Cola Foundation that is supported by the Global Environment & Technology Foundation.

	T/Abregele	Water.org/REST	August 2005
	Hawuzen	Water.org/REST	August 2005
	H/Wajirat	Water.org/REST	August 2005
	S/Samre	Water.org/REST	August 2005
Southern	Badowacho	CRS	January 2008
Nations,	Gofa Zuria	LWI/EKHC	December 2006
Nationalities and	Kucha	LWI/EKHC	December 2006
Peoples' Region	Zalla	LWI/EKHC	December 2006
(SNNPR)	Soro	WV	November 2007
	Limu and Soro	LI/EECMY-DASSC	December 2009
	Tenbaro	WV	December 2009

The IPs addressed water access issues through building and rehabilitating water supply schemes across intervention areas. They also built shared community (public) latrines, HH demonstration pit latrines, and institutional sanitation and handwashing facilities at schools. MWA-EP IPs promoted hygiene and sanitation behavior change predominantly through the participatory hygiene and sanitation transformation (PHAST) methodology.<sup>3</sup> In the final year of implementation, WV and CRS began to use

Figure 15. MWA-EP Objectives

- I) Increase the level of access to sustainable, safe water and sanitation services among poor and vulnerable populations in rural and periurban areas
- 2) Decrease the prevalence of water and sanitation-related diseases, increasing time available for economic development, education, etc.

## **MWA-EP** Objectives

- 3) Promote integrated water (resources) management at the local level with a focus on maintaining the quantity and quality of drinking water
- 4) Develop an efficient, effective and replicable partnership model for service delivery and advocacy

community-led sanitation (CLTS) to trigger behavior change. IPs working in schools formed school WASH Clubs to ensure latrine cleanliness and the presence of soap or ash and water at handwashing stations. MWA partners used the Community Water Management Approach (WASHCOs) to manage water schemes.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> According to the World Health Organizations' "Participatory Hygiene and Sanitation Transformation," PHAST is an adaptation of the Self-esteem, Associative strengths, Resourcefulness, Action-planning and Responsibility (SARAR) methodology of participatory learning, which builds on people's innate ability to address and resolve their own problems. It aims to empower communities to manage their water and to control sanitation-related diseases, and it does so by promoting health awareness and understanding which, in turn, lead to environmental and behavioral improvements.

<sup>&</sup>lt;sup>4</sup> One exception to this was in Ginchi Town, Dendi Woreda, Oromia, where Water.org and partner Water Action introduced a new financial management model by contracting out water points to private operators.

According to MWA-EP's activity reports and monitoring data, the achievements were:

- Construction or rehabilitation of 505 safe water supply schemes,<sup>5</sup> providing water access for an estimated 310,093 people;
- Construction of 91 ventilated improved pit latrines in schools and other institutions, providing sanitation facility access for an estimated 93,379 school children and community members;
- Construction of 31,369 household demonstration pit latrines, providing sanitation facility access to an estimated 181,112 people;
- Construction of 182 shared latrines, providing sanitation facility access to an estimated 11,000 people;
   and
- Provision of hygiene and sanitation education to an estimated 301,550 people.

An external program evaluation was conducted during the final year of MWA-EP in 2008, prior to a one-year extension of the activity. The evaluation found that MWA-EP was "making progress in terms of increasing access to safe water supplies, sanitation and hygiene services in its target areas. There are also some good beginnings of the activity outcomes that contribute positively to the improved health and education of beneficiaries." The evaluation noted key recommendations:

- Sanitation and hygiene components require greater emphasis (149,850 beneficiaries), as they lagged behind water supply development (226,080 beneficiaries).
- MWA-EP should work with the local government to ensure the WASHCOs adopt clearly
  defined roles and responsibilities, including tasks in hygiene promotion, possibly with one
  member specifically assigned to supervise and coordinate these activities.
- The activity should engage greater community participation in planning, such as deciding service levels and the design and implementation of hygiene promotion activities.
- The weak capacity of woreda offices (particularly water, health, and education) and absence of clear lines of accountability, including the lack of WASHCOs' legal status and ownership rights of user groups, remained a constant threat to the long-term sustainability of benefits and should be addressed.
- The absence of a well-articulated information education communication and behavior change communication (BCC) strategy had perhaps limited the activity's impact on disease reduction and should be addressed.

Since the end of MWA-EP in 2009, MWA has continued to implement water and sanitation activities in the same regions through a bridge grant (2010–2012) from the Conrad N. Hilton Foundation (CNHF), additional CNHF and the Coca-Cola Africa Foundation (TCCAF)–funded WASH activities (2012–2014) and CNHF–funded activities between 2014–2017. The current programming replaced Tigray with the Beneshangul-Gumuz Region and added increasing access to WASH in institutions (schools and health care facilities) as one of its goals. It also seeks to strengthen capacity of national and local government, community-based organizations, and the private sector to provide sustainable WASH services.

USAID funded a follow-on activity to MWA-EP implemented by Save the Children called *Your Health is in Your Hands* (STC YHYH) from 2009–2013. STC YHYH operated in the same four regions as MWA-EP with similar objectives to increase access to water and sanitation and promote hygiene behavior. YHYH used CLTS and Hygiene (CLTS-H), which adopted a different hygiene promotion approach and an emphasis on school sanitation. USAID's SIT was applied to the STC YHYH activity in 2015. The SIT,

\_

<sup>&</sup>lt;sup>5</sup> This included construction of deep boreholes, machine-drilled shallow wells, hand-dug wells, and spot springs and spring development with extensions. It also included rehabilitation of hand-dug wells, springs, and shallow wells.

<sup>&</sup>lt;sup>6</sup> The Mitchell Group. 2008. External Program Evaluation: WASH Program in Ethiopia.

developed by USAID and Rotary International, assesses an activity using a set of quantitative and qualitative indicators that are grouped around five main factors associated with sustainability: institutional, management, financial, technical, and environmental. It also looks at different levels of a program, including both household and service provider, and at the enabling environment at the subnational and national levels. The following select risks to sustainability were identified:<sup>7</sup>

- The overall technical, financial, and administrative capacity of service providers at the community level (including WASHCOs and volunteer clubs in schools) was very low across all communities included in the SIT assessment, making minor maintenance challenging;
- Human resource gaps and slow procurement processes within government at the woreda level prevented effective operations and utilization of financial resources in SIT assessment areas;
- Very few low-cost sanitation service options existed in SIT assessment areas;
- Deep-rooted cultural and social norms prevent the adoption of good hygiene behaviors and the widespread and consistent use of latrines and handwashing at all critical times, threatening the success of CLTS-H;
- The monitoring and support provided by the woreda government to the WASH service providers in the community was inconsistent and inadequate;
- Low level of integration of sanitation and hygiene promotion activities between the schools and the broader communities in which they are located made maintaining ODF status challenging;
- The willingness of individual households to pay tariffs for water supply services (particularly from covered springs) that are operated at the community level were low;
- Poor documentation of payments was observed and very few WASHCOs had a bank account, while
  in schools there was virtually no budget available for long-term major repair costs; and
- Regular data collection and dissemination on the quality and quantity of surface and groundwater resources was limited, as was data on water supply demands (including for agricultural, industrial, and domestic uses).

Likewise, the following select drivers to sustainability were identified:8

- Clear national construction standards and guidelines with respect to technical standards for all WASH intervention types considered in the SIT were well developed at the national level and disseminated through the One WASH National Program; and
- Households expressed a very high willingness to pay for sanitation services; however, there was also a correspondingly high perception amongst those of an inability to pay.

The aforementioned evaluation results have been taken into account when developing the methodology and the specific questions included in the interview guides for this ex-post evaluation. Since MWA-EP's initial design, several changes have occurred on a national scale that have also been taken into account. First, in 2015 Ethiopia achieved its Millennium Development Goal target of 57 percent access to safe drinking water, up from 13 percent in 1990. Access to sanitation remains low, however. Only 7 percent of the population had access to basic sanitation in 2015, according to baseline data for the Sustainable Development Goals. By 2020, the Government of Ethiopia (GOE) aims to reach full water access coverage and basic sanitation, 77 percent handwashing coverage, and 80 percent open defecation free (ODF) communities through its One WASH National Program (OWNP).

<sup>&</sup>lt;sup>7</sup> Schweitzer R. 2015. Ethiopia WASH SIT: Final Report.

<sup>8</sup> Ibid.

<sup>9</sup> UNICEF/WHO. 2017. Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines.

#### **EVALUATION DESIGN METHODOLOGY**

#### **PURPOSE**

This evaluation will examine the sustainability of water supply schemes, sanitation facilities, and behavior change activities introduced by MWA-EP more than seven years following activity completion. Key intended users of evaluation findings are USAID, other donors, MWA and its IPs, and implementers of WASH activities in Ethiopia and other countries. Findings will empower the GOE and other host-country governments to hold donors and IPs to higher standards of activity implementation to ensure investments are long-lasting. Findings from this and future evaluations will also assist these intended users in determining areas for improvement in their current process of activity selection, design, implementation, monitoring and evaluation to ensure long-term sustainability and enable improved accountability to stakeholders.

#### **EVALUATION QUESTIONS**

This evaluation will answer the questions in Table 2 below.

**Table 9. Evaluation Questions** 

Water	<ol> <li>What is the level of service at water schemes completed by MWA-EP more than seven years after activity close in terms of basic functionality, quantity output, quality, accessibility, and reliability?</li> <li>To what extent are community members using the water points (by wealth, gender, vulnerability status)?</li> <li>How have water schemes been maintained since MWA-EP activity closed in terms of management activities and systems, maintenance, and fee collection to cover recurrent lifecycle expenditures?</li> </ol>
Sanitation	<ul> <li>4. To what extent are household-level and shared community latrines and handwashing facilities installed by the activity still functional, adequately maintained, and used by men, women, boys, and girls?</li> <li>5. What systems and financial mechanisms have communities used over time to maintain shared sanitation facilities and activities provided by MWA-EP?</li> </ul>
Cross-Cutting	6. For each type of water and sanitation intervention, which factors or approaches (enacted by USAID, implementers, communities, or external entities) contributed to or impaired long-term sustainability of the activity components named above? Specifically, which management, financial, institutional, environmental, and technical factors affected the observed levels of service and functionality?

To answer evaluation question one, the evaluation team will use data from multiple sources to categorize each water scheme according to service level criteria developed by IRC (see Table 3 below).<sup>10,11</sup>

<sup>&</sup>lt;sup>10</sup> Moriarty, Patrick *et al.* 2011. Working paper 2. Ladders for assessing and Costing Water Service Delivery. IRC International Water and Sanitation Centre.

<sup>&</sup>lt;sup>11</sup> Fonseca, Catarina et al. 2011. Briefing Note 1a. Life-Cycle Costs Approach: Costing Sustainable Services. IRC International Water and Sanitation Centre.

Table 10. Levels of Water Service

Service level	Quantity (lpcd)	Quality	Accessibility distance and crowding (mpcd)	Reliability
High	>= 60 Litres per person per day	Meets or exceeds national norms based on regular testing	Less than 10	Very reliable = works all the time
Intermediate	>= 40 Litres per person per day	Acceptable user perception	Between 10 and 30 minutes	
Basic (normative)	>= 20 Litres per person per day	exceeds flational   floriflative population per	Reliable/secure = works mos of the time	
Sub-standard	>=5 Litres per person per day	Negative user perception and/or no testing	Between 30 and 60 minutes (Between 500m and 1000mAND/OR more than normative population per functioning water point)	Problematic =Suffers significant breakdowns and slow repairs
No service	<5 Litres per person per day	Fails to meet national norms	More than 60 minutes (More than 1000m)	Unreliable/insecure = completely broken down

This framework's basic service level aligns with USAID's WASH standard indicators of basic access, and its definition of additional service levels will provide even more information about the sustainability of MWA-EP water provision activities. USAID's WASH indicator HL.8.1-1: "Number of people gaining access to basic drinking water services as a result of USG assistance" identifies 20 liters/person/day as one of the minimum quantity standards for basic access, and basic accessibility requires total round-trip collection time to be 30 minutes or less, including wait time. Without a randomized household survey, the evaluation team unfortunately cannot determine the average distance to a water point across the community. The team will instead be able to estimate average waiting time at the source. This measure of crowding will serve as a partial indicator of accessibility in this framework. Though reliability service level criteria are vague in this framework, the evaluation team will define basic and intermediate service according to USAID's WASH standard indicator HL.8.1-3, which requires year-round access without regular supply rationing or regular seasonal failure. USAID's definition for safely managed water through HL.8.1-2: "Water points categorized into the basic service level must meet a fecal coliform standard of 0 CFU/100 mL, arsenic standard of 10 parts per billion, and (at a minimum) host country standards for other chemicals that have been identified to pose a site-specific risk to human health" matches Ethiopian national standards for fecal coliform and arsenic. Ethiopia has additional standards for chemicals such as fluoride (1.5 mg/L maximum), which is a common problem in certain geographic areas of the country. 12

To support evaluation question three, the evaluation team will seek documentation of lifecycle expenditures according to recurrent expenditure categories described by IRC:13

<sup>&</sup>lt;sup>12</sup> Ethiopian Standards Agency (ESA). 2013. Compulsory Ethiopian Standard (CES) 58: Drinking Water Specifications. First Edition.

<sup>13</sup> Fonseca, Catarina et al. 2011.

- Cost of capital (loan interest)
- Capital maintenance expenditure (nonroutine repair and rehabilitation)
- Operating expenditure (routine, ongoing minor operations and maintenance expenditure on labor, fuel, materials, etc. Includes routine household coping costs to reach their needed level of service such as purchase of supplementary water)
- **Expenditure on direct support** (post-construction capacity building to local stakeholders to support management)
- **Expenditure on indirect support** (cost of macro-level support such as policy and government monitoring and maintenance systems covering the sector rather than a particular water scheme)

The evaluation team will also use this same framework to examine lifecycle costs documented by shared community sanitation block managers, if such records exist. The team will compare costs to user fees and other revenue sources to determine whether revenue is adequate to sustain all recurrent costs.

#### **DATA COLLECTION METHODS**

This evaluation will include structured observations at WASH facilities and qualitative interviews with key stakeholders and beneficiaries. Each data collection method is described briefly below, and more details regarding data collection methods and instruments corresponding to each evaluation question are described in the Evaluation Design Matrix (Table 6).

#### **Structured Observations at Water Points**

To examine sustainability, the team must determine not only whether water points are still dispensing water but also whether they dispense water to ensure at least basic access according to service levels described in Table 3. Assessing *quantity* service levels as well as basic present functionality requires structured observations and tests at the water point as well as source in cases of gravity-fed or piped rural systems. The evaluation team will use a structured observation tool, including flow rate, stroke and leakage tests, and observed risk of contamination. Observations will occur at both the source and up to four water points connected to it. Observations at water points will include observed use of basins and animal troughs, where these have been provided through MWA. Evaluators will also use this opportunity to observe factors that appear to facilitate or impair sustained functionality of this water point, such as engineering technology used or other apparent contextual factors.

Supports evaluation questions 1, 2, 6

#### Structured Group Interview with Water Collectors

Observations will be triangulated with a brief structured group interview with three to five persons gathering water at the time of the water point visit. One interview will be conducted per water point. This will be a group interview of those gathered at the water point; however, one individual may participate if he/she is the only person present. These interviews will elicit information on frequency of service outages and maintenance, ease of access, perceived water sufficiency and quality, equity of access, satisfaction with fees and management, and other source options commonly used.

Supports evaluation questions 1, 2, 3, 6

Group Interview (GI) with Two to Three WASHCO Members

The evaluation team will conduct a small group interview with two to three WASHCO members at selected water points. The team will seek to have at least one female WASHCO representative involved in each interview if females are present on the committee. This interview will combine closed-ended and open-ended questions to ensure an understanding of management systems over time. This interview will rely in part on WASHCO record data. The evaluation team anticipates some past record-keeping will not be available, and therefore, some of the past information may be gleaned solely from WASHCO members' qualitative descriptions. Conditions and practices to be determined include:

- Number of registered water point users, including demographic characteristics (if available);
- WASHCO membership (including gender balance);
- Roles and responsibilities of WASHCO vis-à-vis other parties;
- Complete lifecycle cost data by type of expense, to extent possible;
- Fee structure and its sufficiency to cover costs;
- Community adherence to fees;
- WASHCO capacity to complete maintenance;
- Supply chain for maintenance of water and community sanitation (to the extent WASHCOs bear responsibility for sanitation);
- Details of past maintenance needs since MWA-EP ended, including frequency of and reasons for repair, persons completing repair, funding source for repair, and average number of days of outages;
- System and responsibilities (including local government) for monitoring and addressing water quality; and
- General opinions about successes and challenges related to sustaining water services.

WASHCO interviews will be triangulated with water point user structured interviews. In cases where MWA-EP water points are no longer functional, the evaluation team will attempt to interview former WASHCO members to better understand what led to this failure.

Supports evaluation questions 2, 3, 6

#### Water Quality Testing at Water Points

One component of service level adequacy is water quality. The evaluation team will use field-based water quality testing kits to determine whether each water point is currently free from fecal coliform contamination, per Ethiopian national standards. If feasible, chemical content such as arsenic and fluoride will also be tested. Another key component of the team's service-level quality assessment is consultation of woreda health office records to determine whether water quality standards have been consistently tracked and met. Records and direct testing will be used together to categorize quality levels.

Supports evaluation question 1

#### Structured Observations of Household and Shared Community Latrines

Shared community latrines were only constructed by Lifewater International in Limu and Soro woredas. The evaluation team will sample from these latrine blocks and complete structured observations of cleanliness, safety, privacy, and level of usage by males and females. This will be supplemented by interviews with users and those responsible for maintenance.

Supports evaluation questions 4, 6

#### Key Informant Interviews (KIIs) with Household and Shared Community Latrine Users

The evaluation team will purposively sample both males and females using the latrines to inquire about their perceptions of the latrines, frequency of usage by themselves and other community members (probing on differences by age, gender, disability, poverty, and distance from latrine), perceptions about the quality of maintenance and changes over time, and the degree to which they believe shared community latrines have affected household latrine ownership over time. The team will attempt to select both men and women to capture a variety of ages. If no people are using the latrines at the time of the site visit, the evaluation team will select other community members living nearby the latrines to inquire about the level of community usage, reasons for use/nonuse, and perceptions about maintenance over time.

Supports evaluation questions 4, 5, 6

#### Group Interviews with Shared Community Latrine Management

At each sampled shared latrine block the evaluation team will interview the committee or persons responsible for maintaining the facilities. Interviews will address frequency of usage over time (probing on differences by age, gender, disability, poverty, and distance from latrine); systems for maintenance in terms of roles and responsibilities; lifecycle costs and financing mechanisms; frequency of and approach to completing repairs over time; and perceptions about the degree to which shared community latrines have affected household latrine ownership over time.

Supports evaluation questions 4, 5, 6

#### Key Informant Interviews with MWA-EP Implementers and USAID Staff

In addition to methods mentioned above, the evaluation team will also conduct KIIs with MWA-EP implementers and USAID staff. These interviews, which will be conducted prior to field observations, will provide a deeper understanding of the activity design and implementation from the perspective of staff who were present at the time of the 2004–2009 activity. In cases where no individuals involved in the activity are still present, the evaluation team will seek the next most knowledgeable person who can speak to the organization's general approaches. Implementers will also discuss government policy changes over time, private sector engagement, efforts to improve sustainability, and perceived sustainability challenges, opportunities, and facilitators.

Supports evaluation question 6

#### Key Informant Interview with Woreda and Kebele Government Personnel

In each woreda with a sampled water scheme, the evaluation team will also conduct a KII or GI with woreda government personnel responsible for water scheme oversight. Interviews will include representatives of the water office (responsible for the development of water sources, oversight functionality, operations and maintenance, establishment and training of WASHCOs, and provision of spare parts and reagents) and health office (responsible for monitoring water quality, conducting sanitary inspection, providing technical support for water treatment, facilitating sanitation and hygiene promotion in the community, and overseeing the health extension program). Questions will address the level of woreda and kebele government involvement in oversight and technical support, regulatory and policy framework changes over time, challenges and opportunities to supporting community schemes and sustaining rural water schemes in general. During health office interviews the evaluation team will seek

recorded data on frequency of water quality testing for water points included in the sample and results, dating back to 2009 if possible. In addition, the evaluation team will verify sampled water scheme and shared community latrine sites against woreda and kebele records to confirm whether any similar activities have occurred at these sites since 2009. In cases where such contamination is identified, the evaluation team will consider dropping these sites from data collection activities.

Supports evaluation question 6

#### **SAMPLING STRATEGY**

In accordance with criteria guiding the post project evaluation series, data collection will be limited to locations that did not receive follow-on WASH activities from USAID or other donors. Water CKM reviewed numerous WASH activities that occurred in Ethiopia since 2009 to ensure lack of location overlap. This process is described in Annex A. Two out of 24 woredas with other WASH interventions since 2009 were excluded from the sampling frame after this exercise. Water CKM is still waiting to receive responses from UNICEF and other implementers regarding other project locations, which may result in additional exclusions. For this reason, exact sampling locations have not yet been selected. Woreda and IP activities eligible for inclusion at this stage are shown in Table 4.

<sup>&</sup>lt;sup>14</sup> Excluded woredas were those targeted with CNHF funding (projects occurring 2010–2012, 2011–2014, or 2014–2017) and woredas targeted for the USAID–funded STC YHYH activity.

Table 11. Sampling frame of Locations Eligible for MWA-EP Post Project Evaluation

Region	Woreda	Kebeles	Implementing Partner	Water Activities Completed	Sanitation Completed
Amhara	Achefer	Denbolla, Forhe-sankra, Kunzula Zuria, Estumit, Womberial-yesus, Womberia-berkanta	Food for the Hungry	24 hand dug wells, 9 spring development works, 5 rehabilitated hand dug wells; 5 showers & washing basins, 7 cattle troughs	6 VIP latrines in schools; 952 traditional pit latrines, 31,939 community members received san/hyg education
	Bure	Denbun, Sertekez, Tyatya, Zeshiwen	CRS/Water Action	4 drilled shallow wells; 10 hand dug wells; 6 spot springs w/extension	4 school ventilated improved pit (VIP) latrines I79 demonstration HH pit latrines
	Dera	Goha, Agar W.gati, Gelawdiwos and Dagon Debresina	WV .	10 shallow wells, 6 hand dug wells, 10 washing basins, 3 cattle troughs, 16 WASHCOs	
	Dangila	Bacha Dimssa, Ziguda Gult, Abadra Agaga, Dubie	FH	17 new water schemes, rehabilitated 8 schemes, 4 cattle troughs constructed, 4 washing basins	7 VIP school latrines, 872 HH built tradition latrines, 44,802 people received san/hyg education
	Simada	Kebele 2,3,4,5,6,9,10,11,12,15,19,20, and 22	FH	16 hand dug wells, 22 spring capping works, 22 schemes rehabilitated, 60 WASHCOs established, 3 cattle troughs, 7 washing basins	12 school VIP latrines, one woreda market place latrine, one at woreda bus station, 649 HH constructed traditional pit latrines with hand washing facilities

	West Estie	Mugerzeboye, Shimemusha, Yedidgmegn	CARE	II spring developments, 21 hand dug wells, 176 WASHCO members	13 VIP latrines at schools, 2,365 HH constructed individual pit latrines, 15,764 people received san/hyg education
	Farta	Qualiha, Zimha, Mahidermariam, Meskeltsion, Addis betekrstian, Simna, Medeb Gubida, Gentegna Woibila Goref, Atikana, Debelima, Amjaye addeder, Wukiro Tado mender, Askuma Deremo	CARE	45 hand dug wells, 40 spot spring development works, 85 WASHCOs	21 institutional VIP latrines, 21,237 people received san/hyg education, 3,500 HH constructed traditional pit latrines
Oromia	Tole	Alenushenkora, Kursti, Tume-wayu/tegeba	HOPE 2020	I drilled shallow well, 6 water points constructed (type not specified), 6 shower houses; 6 washing basins; 6 cattle troughs	3 school VIP latrines
	Wonchi	Dimtu	WV	I spot springs w/extension, 6 water points constructed (type not specified), 3 washing basins, 4 cattle troughs	
	Dendi	Ginchi Town, Dano-Ejersa Gibe	Water.org/Water Action	I borehole, reservoir/piping, I4 water points; I4 WASHCOs	6 VIP latrines, 40 model HH constructed traditional pit latrines

17 | MWA-EP EX-POST EVALUATION USAID.GOV

SNNPR	Gofa Zuria	Dano Myde I; Danag (Gogera) 2; Selamber 2; Kodoume; Gala Gibo; Merka I; Tella; Selamber 3; Mesha Cheba; Morka 2; Dana 3; Dana 4; Selamber 4	LWI/EKHC	39 drilled shallow wells, I hand dug well, 37 rehabilitated shallow wells, 14 shallow wells maintained	
	Kucha	Gaale, HalaHa, Masha Chabe, Mela Kayisha, Morka, Selamber Ketena 2, Sikolle Aslalo, Wuzete Banata	LWI/EKHC	Unknown at present	
	Soro	Ist Oda, 2nd Hankota, Hahora, Sundusa	LI/EECMY-DASSC, WV	28 water points (type not specified)	182 shared community latrines; 10 school VIP latrines
	Limu	Digiba, Lisana Sena, Bobicho, Lisana Kusa, Lareba	LI	Unknown at present	
	Tenbaro	Mudula town, Osheto, Badda and Zambara	WV	<ul><li>13 water points (type not specified),</li><li>5 washing basins,</li><li>7 cattle troughs</li></ul>	
	Zalla	Mela kaysha, Mela Bayisa, Dale Wageshu	LWI/EKHC	Unknown at present	
Tigray	Adwa	Gendebta, Mariam-shewito, Simret, Yeha	Water.org/REST	39 hand dug wells, 12 spot springs/extension, 6 rainwater harvesting, 4 boreholes with handpumps	
	Hawuzen	Debrehiwot, Dgum, Frewini, Hatset, Koraro, Megab, Siluh	Water.org/REST	16 water points, I rainwater harvesting	

H/Wajirat	Hageresem, Adimso, Amdiweye, Degan, Fikre Alem, May Nebri, Hintalo, Bahirtseba, Adimesanu, SenaelH/selam, Ara Asega, Adikeyih	Water.org/REST		
S/Samre	Addis Alem, Chelsret, Hintsa Wa, Nebar Hadt, Adi dekiala,Hageresem, Mai Teklai, Adiweyne, W/adeka, Cheli Esret	Water.org/REST		
T/Abregele	Derko, E/Rufael, Hibret, Lemlem, Simret, TR/Mekerne	Water.org/REST	6 spring with handpumps, 4 boreholes, 2 rainwater harvesting	
Weri Leke	Misema, Mai Tuem, Azmera, Endachewa, Wuhdet , Maichekemte, Mai Kuhli, Zongi, Mai Sagla, Weri	Water.org/REST	II shallow wells,18 hand dug wells, 4 spring catchments	11,270 HH latrines

19 | MWA-EP EX-POST EVALUATION USAID.GOV

Given the predominantly qualitative nature of this evaluation, a representative sample of MWA-EP activities will not be possible. Rather, woredas will be selected using a stratified sample based on the types of infrastructure installed in the woreda and the distance between eligible kebeles. In addition to interviews with USAID, IPs, and GOE officials, the team will visit water schemes, household-level latrines, and communal latrine blocks. Table 5 outlines the data collection activities for each type of site to be visited.

Table 12. Data Collection Activities for Each Type of Site

Water Schemes	Household Latrines	Shared Community Latrine Block	Project-Level
<ul> <li>I structured observation at each water point (up to 4/scheme)</li> <li>I group interview with water collectors at each water point (up to 4/scheme)</li> <li>I WASHCO group interview (for full scheme or point most frequently used)</li> </ul>	<ul> <li>I structured observation at up to 4 HH latrines</li> <li>4 KIIs with owner households (one per latrine)</li> </ul>	<ul> <li>I structured observation at all latrines</li> <li>4 KIIs with latrine users (2 male, 2 female)</li> <li>I group interview with shared community latrine management</li> </ul>	In Addis:  I group interview or KII with USAID staff  I group interview or KII with staff of each implementing partner whose work is under evaluation  In the field:  I KII with government water office and I KII with health office in each woreda visited where relevant works are under evaluation  I KII with kebele government WASH representative in each kebele visited

The team will visit one water scheme per kebele and up to 4 HH latrines in each village selected. Communal latrine installations were only constructed in two woredas, therefore the community to be visited will be selected purposively to be near other installations. Water schemes will be purposively selected in order to ensure a variety of types of water schemes are selected for the evaluation (e.g., boreholes, hand-dug wells, spot springs, drilled shallow wells with hand pumps). HH latrine installations will be randomly selected to the extent possible within locations where a water scheme is visited. Given budgetary constraints, the team is proposing to restrict data collection to three regions and five woredas.

Table 13. Summary Information for Fieldwork

Summary Information for Recommended Fieldwork Option				
Number of regions	3	Number of water points	32	
Number of woredas 5 Number of HH latrines 24				

Number of days of fieldwork	19	Number of communal latrine blocks	3
Total Structured Observations	63	Total Klls & Gls	98

The proposed regions are Oromia, SNNPR, and Amhara. Oromia will serve as a nearby location to Addis Ababa in which to pilot the interview guides before the team splits in two. Within the regions of SNNPR and Amhara, there are numerous potential woredas without risk of contamination from more recent WASH programming. The evaluation team believes these regions will be of interest to USAID because of the current programming within these regions overall. The team leader, two local senior evaluators, and a local mid-level evaluation specialist will conduct data collection supported by a translator. Indicated fieldwork includes the inbrief and outbrief with the mission, as well as two days for training at the beginning of the data collection period. Total interviews and observations come to 161.

#### **DATA ANALYSIS**

The evaluation team will transcribe and translate qualitative interviews and then analyze them using a common codebook to coordinate identification of themes and opinions. The evaluation team will analyze and triangulate all relevant stakeholder perspectives to ensure conclusions for each evaluation question reflect multiple perspectives.

The evaluation team will input quantitative water point and latrine and hygiene facility observation data as well as quantifiable data from health office water quality records and WASHCO records such as registered number of water users, cost data, repair frequencies, and other figures into an Excel database to facilitate analysis. Results will be disaggregated by region and scheme type where possible. Data regarding sanitation and hygiene sustainability will be gender-disaggregated. Each water point will be categorized into service level for each category according to definitions in Table 3 using method triangulation. In cases where triangulation produces discrepant information, a single primary data source has been identified in Table 6.

Desk review of relevant literature in the rural WASH sector and concerning Ethiopia in particular, such as USAID's Household Economic Survey, will be conducted throughout the evaluation and results from this review will be triangulated with results from qualitative and quantitative aspects of data collection.

Table 14. Evaluation Design Matrix

Evaluation Question	Indicators	Data Sources	Data Collection Tools	Analysis Methods	Risks
I) What is the	a) % of presently	a-d) (primary source for	Structured observation tool includes	Quantification of	Schemes
present	functional water	a, b) Structured	assessment through functionality test; flow	proportion of water	difficult to
functionality and	points (by type,	observations at water	rate; stroke and leakage tests; length and	points meeting	locate
level of service at	region)	points	wait time in queue; characteristics of	criteria for each	
water schemes			people in queue; observed use of basins	service level (by	WASHCO
completed by	b) % of water points	b-e) WASHCO (or	and animal troughs; observed	type, region)	user records
MWA-EP more	providing water	similar management	contamination risk. To support question		may be difficu
than seven years	quantity at each	body) group interview	6, the tool will include expert assessment	Coding and	to obtain or
after activity close	service level: high	and examination of	of appropriate technology and access and	synthesis of	inaccurate
in terms of basic	(≥60L/person/day),	records	quality impediments	qualitative findings	
functionality,	intermediate				
quantity output,	(≥40L/p/d), basic	c) Water quality testing	Qualitative interview guide with		
quality,	(≥20L/p/d),	by evaluation team	WASHCO includes interview questions		
accessibility, and	substandard		and review of records to capture # and		
reliability?	(≥5L/p/d)	c) (primary for c)	characteristics of registered water scheme		
		Woreda health office	users now compared to past (used in part		
	c) % of water points	water quality test	to inform L/person/day calculations);		
	meeting national	records	average # days of water point downtime;		
	quality standards at		repair log; user and community population		
	each service level as	b-f) Structured	data; water quality measurement records		
	defined in Table 3,	interviews with water	(though the team will seek these from		
	according to	users (primary)	woreda health offices, these may be		
	recorded data and	WASHCO (or similar	available from WASHCO); and typical		
	testing completed by	management body)	queue time. Regarding evaluation question		
	evaluation team	examination of records	3, the interview will also address detailed		
		(water users record/	management practices, including lifecycle		
	d) % of water points	users master list at	costs and expenditures: sources and		
	with crowding/queue	scheme level)	sufficiency of revenue; roles and		
	meeting accessibility	(triangulation)	responsibilities for maintenance,		
	standards at each	,	monitoring, and other management		
			practices; role of local government;		

	service level, defined in Table 3		gender representation over time; and other issues.		
	e) % of water points meeting reliability		Water quality testing to measure presence of fecal coliforms.		
	standards at each		KII and record review with woreda		
	defined in Table 3.		health office will provide records of		
	f) Extent of use of		frequency and results of water quality testing.		
	other sources to		testing.		
	meet needs		Water user structured interview guide includes assessment of sufficiency		
	g) Community satisfaction with		of water for daily household needs;		
	water point		satisfaction with water quality, quantity, management; equity of access by		
	·		wealth/gender/vulnerability status; average		
			# days of water point downtime; typical queue time; usage patterns throughout the		
			year, for which purposes, by which types		
			of people		
2) To what extent	a) estimated	Structured interviews	See WASHCO and water user	Quantification of	Local
are community	proportion of local	with water users	descriptions above	proportion of	population data
members using	community	(triangulation)		population using	or WASHCO
the water points (by wealth,	population using water point year-			water point year- round	user records may be difficult
gender,	round compared to			Todild	to obtain or
vulnerability	previous years (if			Coding and	inaccurate. If
status)? Why?	feasible, approximate			synthesis of	so, proportion
	by wealth, gender,			qualitative findings	using will be an
	vulnerability status)			for triangulation	approximation based on
					qualitative data

23 | MWA-EP EX-POST EVALUATION USAID.GOV

3) How have	a) % WASHCOs (or	a-e) (primary)	See WASHCO and water user	Quantification of	WASHCOs
water schemes	similar bodies) with	WASHCO (or similar	descriptions above	proportion of	have disbanded
been maintained	adequate capital	management body)		WASHCOs meeting	(in this case
since MWA-EP	flows to cover	group interview and	KII guide with woreda/kebele water	criteria	community
activity close in	recurrent	examination of records	office will assess local government		leaders will be
terms of	expenditures		involvement in supporting WASHCOs in	Coding and	interviewed)
management	'	a-e) (triangulation)	monitoring and management functions	synthesis of	,
activities and	b) % WASHCOs	Structured interviews		qualitative findings	WASHCO
systems,	with bank accounts	with water users		for description of	user records
maintenance, and	and transparent	c-e) Woreda/kebele		management	may be difficult
fee collection to	record-keeping	water office interview		practices and	to obtain or
cover recurrent				triangulation	inaccurate
lifecycle	c) % water points				
expenditures?	with average outages				Cost data not
•	lasting less than 5				available
	days				
	d) % water points				
	with clear				
	management roles				
	and responsibilities				
	e) % water points				
	supported with				
	adequate knowledge				
	and supply chain				
	access for repairs				
	(including spare parts				
	& reagents for				
	disinfection and				
	water treatment)				
4) To what extent	a) % shared	a) Structured	Structured shared community	Quantification of %	Shared
are household-	community latrines	observations at shared	latrine observation tool includes	of latrines meeting	community
level and shared			observation of evident usage, cleanliness,	functionality and	

community	that are in use and of	community latrine	odor, structural safety, privacy, queue, and	quality criteria (by	latrines difficult
latrines and	acceptable quality	blocks	availability of handwashing facilities with	gender)	to locate
handwashing			soap		
facilities installed		a) KIIs with shared		Coding and	
by the activity still		community latrine users	KII guide with shared community	synthesis of	
functional,			latrine users addresses perceptions of	qualitative findings	
maintained, and			the latrines, frequency of usage by		
used by men,			themselves and other community		
women, boys, and			members (probing on differences by age,		
girls?			gender, disability, poverty, and distance		
			from latrine), perceptions about the		
			quality of maintenance and changes over		
			time, frequency of unavailability, and the		
			degree to which they believe shared		
			community latrines have affected		
			household latrine ownership over time		
5) What systems	a) % of communities	a) Group interviews	Group interview guide with shared	Quantification of %	Shared
and financial	with management	with shared community	community latrine management	meeting criteria	community
mechanisms have	structures and	latrine management	addresses frequency of usage over time		latrines difficult
communities used	procedures in place		(probing on differences by age, gender,	Coding and	to locate
over time to	for shared latrine		disability, poverty, and distance from	synthesis of	
maintain shared	blocks that show		latrine); systems for maintenance in terms	qualitative findings	Cost data not
WASH facilities	evidence of regular		of roles and responsibilities, financing	to provide general	available
and activities	maintenance		mechanisms, frequency of and approach to	description of	
provided by	activities		completing repairs over time; and	management	
MWA-EP?			perceptions about the degree to which	procedures and	
	b) % of shared		shared community latrines have affected	triangulation of data	
	latrine management		household latrine ownership over time		
	structures with				
	adequate capital				
	flows to cover				
	recurrent				
	expenditures				

25 | MWA-EP EX-POST EVALUATION USAID.GOV

6) For each type	a) Perceived factors	Klls with woreda and	Interview guide with woreda	Coding and	Implementing
of water and	that improved and	kebele government staff	government (water, health offices)	synthesis of	partner (IP)
sanitation	inhibited ability to	responsible for WASH	includes assessment of kebele and woreda	qualitative findings	staff involved in
intervention,	manage/maintain/use	oversight	government frequency and type of		2004–2009
which factors or	water schemes and		involvement in scheme oversight and		may not still be
approaches	sanitation over time	KIIs with IPs	technical support; regulatory and policy		employed with
(enacted by			framework changes over time; challenges		IP
USAID,		KIIs with USAID	to supporting community schemes;		
implementers,		personnel responsible	challenges to sustaining rural water		Government
communities, or		for MWA-EP or follow-	schemes in general; oversight and		staff not
external entities)		ons	challenges related to shared and		available to
contributed to or			institutional latrines		meet
impaired long-		Structured observation			evaluation
term sustainability		tool	Interview guide with IPs includes		team in some
of the activity			detailed activity description; discussion of		cases
components		KIIs with WASHCOs	government policy changes over time;		
named above?			private sector engagement; efforts to		
Specifically, which		Group interviews with	improve sustainability; perceived		
management,		shared community	challenges and facilitators to sustainability		
financial,		latrine management			
institutional,			Interview guide with USAID (includes		
environmental,		KIIs with shared	assessment of lessons learned and changes		
and technical		community latrine users	in approach over time as a result;		
factors affected			perceived barriers and facilitators to		
the observed			sustainability)		
levels of service					
and functionality?			See descriptions of all other guides above		

#### PLAN FOR GENDER AND SOCIAL ANALYSIS

Gender and social factors play a strong role in WASH practices. In rural Ethiopia females typically bear the greatest burden for household water collection and application of hygiene practices; however, water resources management and decisionmaking at the community level is often dominated by males. Gender roles and expectations as well as gender-based vulnerabilities can also affect sanitation preferences. In any context, poorer community members or religious or ethnic minorities may have different access to WASH improvements due to financial or social constraints. Religious beliefs of Muslims tend to drive different sanitation and hygiene habits and preferences compared to Christians. To understand the degree to which activity outcomes have been sustained in light of gender, culture, and socio-economic status, the evaluation team will seek gender, socio-economic status, and culture/religion balance in interview targets to the extent possible.

All GIs will be separated by gender to encourage freedom of response. Interview guides will inquire about gender roles, religion, culture, and socio-economic status in decisionmaking, financing, and maintenance of sanitation and hygiene practices both at the household and community level to identify whether these factors play a role that should be addressed to improve sustainability of WASH results in the future. Gender and religious composition of WASHCOs will also be examined. Furthermore, the evaluation team will be staffed with gender balance in mind, such that women are interviewing female respondents to the extent possible and males are interviewing men to the extent possible. This will also allow an analytical lens that can address whether male or female respondents have differing views or experiences related to issues discussed. The evaluation team intends to obtain sex, age, and poverty-disaggregated quantitative data where possible and when available and address any differences noted by gender or poverty status in the analysis. For example, the team will note latrine conditions and usage separately for females and males.

#### **EVALUATION DESIGN LIMITATIONS AND RISKS**

The evaluation team notes a few limitations to the proposed evaluation design as well as risks to the evaluation below along with mitigation strategies. Despite these limitations, the team believes this proposal includes the best possible evaluation approach for this context, given time and resource constraints.

The length of time between the end of the activity in December 2009 and this present study increases the likelihood that other donors or local governments have completed WASH interventions in sampled locations. This "multiple treatment interference" effect will be mitigated to the extent possible by reaching out to USAID, MWA-EP implementers active in targeted woredas, government officials, and other local groups to identify WASH activities in those locations since 2009. The evaluation team has already assessed a number of other activities and ruled out for certain two woredas in which other activities are known to have occurred since 2009. The team will continue to seek out information about other donor activities throughout the planning process. Adjustments to sampled locations can be made in cases where another intervention will have affected outcomes of interest. In spite of this, the team may still discover other activities having taken place when they arrive in the field. To mitigate this, the evaluation team will work to complete its interview with each woreda water office and health office prior to data collection at water points. During these interviews the team will verify whether any other interventions have occurred in sampled communities. In these cases data collection will be avoided if the MWA-EP intervention's outcomes cannot be isolated, or particular data components will be removed from analysis. Community hygiene and sanitation outcomes resulting from PHAST activities cannot be evaluated quantitatively due to the lack of endline data to provide a point of comparison. Though CLTS was introduced by two implementers in the final year of the activity, it does not seem feasible to secure lists of declared ODF villages such that they can be examined to determine continued ODF status. This means household-level sanitation and hygiene activities will not be addressed through this evaluation.

Risks to evaluation quality and depth relate to potential difficulties locating water points, WASHCO records, household latrines dating to 2009, or knowledgeable implementers or USAID staff given the length of time since the activity ended. To the extent possible the evaluation team will seek support from local MWA-EP implementers to locate each site. In cases where WASHCO records are not available or complete, the team will rely on members' qualitative recollection and note it as such. In cases where persons are no longer available to speak about MWA-EP firsthand, the team will rely on others with some peripheral knowledge.

While selection of GI participants through recommendations from the community is the most common approach to qualitative interview participant selection, it can potentially create bias if recommended participants all share higher education or privileged access to local authorities or teachers. The evaluation team will be explicit that it is seeking typical community members representing various economic classes.

Finally, fieldwork is proposed for the month of October, which follows the rainy season in Ethiopia. It is possible that in some remote locations access will be difficult, and that farmers will be busier than during the dry season. The evaluation team will make sure the access of locations is taken into account during planning and, in terms of timing interviews with beneficiaries, will adapt to their schedule to ensure diversity of responses.

#### **UTILIZATION PLAN**

The evaluation team will present preliminary findings to USAID/Ethiopia in Addis Ababa at the conclusion of data collection. An additional presentation will be held with MWA partners to provide early feedback on results. The evaluation team will then deliver a draft evaluation report to E3/W, USAID/Ethiopia, and MWA for comments prior to finalization to ensure it accurately portrays activities and clearly and effectively presents findings and recommendations. To encourage wider utilization and ultimate compilation with other sustainability evaluation "chapters" to come later in the evaluation series, the report will be succinct and will highlight actionable recommendations for the intended users of the evaluation.

If desired, the evaluation team will also give a presentation of the final report findings in Washington, DC, to E3/W, MWA headquarters, and via webinar connection to the USAID/Ethiopia Mission, MWA Ethiopia partners, and other interested stakeholders. The Water CKM team will post the final report to USAID's <u>Development Experience Clearinghouse</u> and collaborate with E3/W to facilitate dissemination to key stakeholders, including USAID missions, USAID/Washington staff, and IPs. A short evaluation brief will be written following approval of the final report, as well as a blog post on Water CKM's Globalwaters.org website to share findings more broadly. Findings from this evaluation, and future sustainability evaluation chapters, will be of interest to the wider WASH community and will be distributed broadly to inform sectoral discussion on sustainability. The Water CKM team will work with E3/W to identify additional channels and timing for dissemination of findings. Potential channels may include conferences, brown bags, and webinars in the water sector. The Water CKM team will also explore different formats for sharing findings with E3/W beyond the standard report format, including videos or podcasts.

#### TEAM COMPOSITION AND MANAGEMENT PLAN

#### **TEAM COMPOSITION**

The evaluation team will consist of individuals that provide sufficient collective expertise to address all technical knowledge related to rural WASH. In particular, this includes evaluation expertise, local language expertise, rural Ethiopian WASH expertise, and local context and logistical planning expertise. Though the team composition and individual roles may shift among members, below is an illustrative listing of a team for this evaluation. As mentioned above, the team will seek gender balance in identifying team members.

- Kari Nelson, Team Leader and (STA SI), will lead background research, coordinate and conduct field visits and data collection, lead data analysis, and co-author the evaluation report.
- Annette Fay, Water CKM Project Monitoring and Evaluation Specialist (SI), will analyze data and co-author the evaluation report.
- Leslie Hodel, Senior Technical Advisor (STA SI), led the evaluation design.
- **Seifu Tilahun, Ph.D., Senior Evaluator**, will review the evaluation design, conduct field visits and data collection, and support in the analysis and report writing as needed.
- Yemarshet Yemane, Senior Evaluator, will review the evaluation design, conduct field visits and data collection, and support in the analysis and report writing as needed.
- Dessalew Worky Aynalem, Mid-level Evaluator, will provide feedback on evaluation tools and methods, conduct KIIs and GIs, and assist with data analysis and report writing as needed.
- **Two interpreters** will support the evaluation and team with Amharic and Oromifa interpretation during fieldwork data collection.
- One logistician will support the evaluation team. Based on the experience from the first post
  project evaluation, the logistician will ideally have previously worked on MWA-EP, as this will
  assist in locating targeted respondents. If not, he/she will have work experience in the data
  collection locations.

#### **EVALUATION TIMELINE**

**Annex B** and the list below provide a preliminary timeline for conducting the evaluation. In-country fieldwork will likely follow this approximate schedule, but the exact duration and route will be determined after final sample locations are known and in consultation with the fully staffed evaluation team.

- Day I: Evaluation team planning meeting
- Day 2: In-briefing with USAID mission; interviews with USAID, IPs; additional internal evaluation team planning
- Day 3: Qualitative training; translator training for Klls/Gls
- Day 4: Pilot and refinement of water point observations, water testing, and WASHCO interview protocols
- Days 5–18: Data collection as follows:
  - **Team I:** Team Leader + Senior Evaluator + Interpreter
  - Team 2: Senior Evaluator + Mid-Level Evaluator + Interpreter
- Day 19: Evaluation team preliminary data analysis workshop
- Day 20: Mission out-briefing and preliminary results presentation

Based on the number of data collection activities required at each water scheme, it is estimated that all data collection from each water scheme can be completed within 1.5 days, though in some cases data

collection may require more time. Each data collection team would strive to travel between sites within the remaining half day. All data collection activities at a shared community latrine would be completed within a day, and in cases where two sites are nearby, 1.5 to two shared latrine blocks can be completed within one day. Up to four household latrines can be completed in half a day.

#### **DELIVERABLES**

The evaluation team will submit the following deliverables:

- Inception Report. A draft inception report was submitted on July 28, 2017, and a final version was submitted on August 21, 2017. The inception report includes an overview of evaluation objectives and evaluation questions, narrative and graphic description of the timeline for fieldwork, discussion of evaluation design and data collection methods, identification of data sources, data analysis plan, and discussion of constraints and limitations. In order to develop an inception report that meets the needs of the mission, the Water CKM team met with the USAID/Ethiopia WASH representative to ensure her data needs are reflected on the evaluation questions and methodology.
- 2. **In-Briefing with USAID.** The evaluation team will provide an in-brief to the USAID/Ethiopia Water Office and other interested mission staff preferably on October 3, 2017 but no later than October 5, 2017 to present the objectives and methodology for the evaluation.
- 3. **Out-Briefing with USAID.** The out-briefing will consist of a PowerPoint presentation of findings, conclusions, and preliminary recommendations to be presented to USAID before international team members depart from Ethiopia. The out-briefing is tentatively planned for October 20, 2017.
- 4. **Findings workshops with E3/W.** Upon return from fieldwork, the Team Leader with facilitate a preliminary findings workshop with the E3/W team that will inform data coding and analysis. This workshop is tentatively schedule on November 6, 2017. Once the data has been analyzed, the Team Leader will facilitate another workshop that to ensure no further analysis is needed before report writing. This workshop is tentatively scheduled for December 5, 2017.
- 5. **First Draft Evaluation Report.** The draft report will be submitted on December 22, 2017. The report will include the following sections: executive summary, purpose of the evaluation, methodology, findings, conclusions, and recommendations. USAID/E3 Water Office and USAID/Ethiopia and will provide comments within 10 business days to the interim report.
- 6. **Second Draft Evaluation Report.** The Team Leader will revise the first draft evaluation report into a second draft that reflects USAID's comments and suggestions. The final report will be submitted to the Contracting Officer Representative by January 26, 2018.
- 7. **Final Evaluation Report.** If another round of comments is needed, the Team Leader will revise the second draft into a final evaluation report which will be submitted by February 23, 2018.

## **INCEPTION REPORT ANNEXES**

Annex A: Assessment of Site Contamination

Annex B: Evaluation Timeline

# INCEPTION REPORT ANNEX A: ASSESSMENT OF SITE CONTAMINATION

To isolate site conditions that represent the level of sustainability of MWA-EP activities alone, this evaluation must only include MWA-EP sites that have not received additional WASH interventions from other parties after 2009. The Water CKM team conducted an exhaustive search through different sources to identify other projects located in the same areas that may "contaminate" evaluation results.

First, Water CKM reviewed woredas where MWA partners implemented WASH activities with follow-on funding from the Conrad N. Hilton Foundation. Woredas that received follow-on funding were excluded from the evaluation sampling frame. Sites targeted by USAID's Your Health is in Your Hands activity, implemented by Save the Children, were also excluded. Second, Water CKM reviewed the historical Safeguarding the World's Water report data, which details the names of USAID-funded activities that were allocated water funding between fiscal year (FY) 2009 to FY2015. Through these data, Water CKM extracted all USAID Mission and Central Mechanism-funded and Overseas Foreign Disaster Assistance (OFDA)-funded WASH activities in Ethiopia since FY2009. Identifying the woredas or kebeles where these WASH activities took place proved to be more difficult. Materials available through the Development Experience Clearinghouse (DEC) or through internet search were not all forthcoming about specific locations. Nevertheless, Water CKM identified woredas and kebeles for the majority of the USAID/Ethiopia Mission-funded activities and compared them to MWA-EP woredas and kebeles. OFDA activities were more difficult to locate because of the brevity of their implementation and the lack of readily available reporting from implementers.

For non-USAID funded activities, Water CKM conducted internet searches to identify different nonprofit organizations that implemented WASH projects, including World Vision, Save the Children, Water.org, IRC, Project Concern, UNICEF, Project Waterfall, SNV, and the Coca-Cola Foundation. Water CKM also searched for WASH activities funded by bilateral and multilateral agencies including the United Nations, World Bank Group, African Development Bank, European Union, Australia, South Korea, and Japan for WASH-related funding in Ethiopia. Lastly, Water CKM is searching for documentation of any GOE WASH-related activities.

In cases where locations of other WASH activities were not specified in documents obtained by the Water CKM team, Water CKM has reached out to implementers to request location information. The evaluation team will use this information to exclude additional locations from the sampling frame as needed.

## **INCEPTION REPORT ANNEX B: EVALUATION TIMELINE**

	Task Name	Start	Finish	hal 1	Aug-1	7	Sep-17		ct-17	Nov-1	7	Dec-17	lan	-18	   Feb-	1.8
	T d J K INGIII E	start	FIIIISII	Jul-1	. Ung-1	1	3eh-17		U(-1/	1/04-1	´	Dec-17	Jan	-10	1 60	.10
1	Evaluation Planning	Fri 28/Jul/17	Sat 30/Sep/17	+				-								
1.1	Draft inception report	Fri 28/Jul/17	Fri 28/Jul/17	•												
1.2	USAID comments	Fri 11/Aug/17	Fri 11/Aug/17		•											
1.3	Final inception report	Mon 21/Aug/17	Mon 21/Aug/17			<b>•</b>										
1.4	Local team recruitment, logistics and planning	Mon 31/Jul/17	Sat 30/Sep/17													
1.5	Protocol, sampling frame, instrument finalization	Mon 21/Aug/17	Fri 15/Sep/17													
2	Fieldwork	Sat 30/Sep/17	Fri 03/Nov/17					-		<b>→</b>						
2.1	International travel	Sat 30/Sep/17	Mon 02/Oct/17													
2.2	Team planning meeting	Mon 02/Oct/17	Mon 02/Oct/17					•								
2.3	In-brief with Mission	Tue 03/Oct/17	Tue 03/Oct/17					•								
2.4	Piloting and field data collection	Thu 05/Oct/17	Wed 18/Oct/17													
2.5	Out-brief with Mission	Fri 20/Oct/17	Fri 20/Oct/17													
2.6	Transcription and translation	Mon 09/Oct/17	Fri 03/Nov/17													
2.7	International travel	Sat 21/Oct/17	Mon 23/Oct/17													
3	Analysis and Report Writing	Mon 06/Nov/17	Fri 23/Feb/18							<b>—</b>						$\rightarrow$
3.1	Preliminary findings workshop with E3/W	Mon 06/Nov/17	Mon 06/Nov/17							•						
3.2	Qualitative Coding	Mon 06/Nov/17	Fri 17/Nov/17													
3.3	Findings workshop with E3/W	Tue 05/Dec/17	Tue 05/Dec/17									<b>•</b>				
3.4	Data analysis & report writing	Mon 20/Nov/17	Fri 22/Dec/17													
3.5	First draft evaluation report	Fri 22/Dec/17	Fri 22/Dec/17									•				
3.6	USAID comments	Fri 22/Dec/17	Fri 12/Jan/18													
3.7	Second draft evaluation report	Fri 26/Jan/18	Fri 26/Jan/18													
3.8	USAID comments	Fri 26/Jan/18	Fri 09/Feb/18													
3.9	Final evaluation report	Fri 23/Feb/18	Fri 23/Feb/18													•

## END OF INCEPTION REPORT

#### ANNEX II: DATA COLLECTION TOOLS

#### I. Interview Guides

# a. Informed Consent Statement to be Used for All Data Collection Efforts (Interviews, Focus Group Discussions)

Hello! We are here on behalf of a team from the United States called ECODIT, which is doing a study to help USAID better understand the Millennium Water Alliance-Ethiopia (MWA-EP) activity, implemented from 2004-2009. Our team was not a part of the implementation of this activity. We are independent evaluators who are here to learn about how well the activities and benefits from the activity have continued after the end of the activity.

Through this evaluation we have selected some of your organization's sites, which we plan to visit to learn whether activities and functionality have been sustained. We'd like to talk to you to learn more about your MWA-EP activities here and to learn about factors that may have affected the ability to sustain results. This information can help USAID improve its activities in the future throughout Ethiopia. Because you participated in this project, we are inviting you to help us understand these things by participating in this interview and sharing your opinions. Because we aim to learn both about what has helped sustain results as well as what did not help, there are no right or wrong answers. We seek your candid opinions.

This discussion will take about I hour of your time. There is no penalty or problem at all if you prefer not to participate. There is no risk to participating and also no direct benefit to you or your organization if you do choose to participate, other than knowing you may be helping to improve activities for other communities in Ethiopia in the future.

We won't be addressing any sensitive topics, but when we make a report on our findings, we will not include your name alongside opinions you share. However, in some cases we may want to name your organization. If there is anything you discuss that you prefer to take "off the record", just let me know and I will honor that by pausing the recording and not attributing your organization. We want you to feel free to express your opinions. If you don't feel comfortable answering a question, you can simply refuse to answer without problem.

Do you agree to participate? Yes No (if no, end interview)
Informed consent discussion completed? Yes (interviewer initials)
ASK: Do you mind if we record?
ASK: Do you want to participate?
ASK: Do you have any questions?

## b. Key Informant/Group Interview – USAID Employee

## 

Name of Interviewer: Name of Note-taker:

# MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

#### Questions (6)

Location of interview:

- 1. What was the nature of your involvement with MWA-EP (2004-2009)?
  - a. If not familiar with MWA-EP, when did you begin your current role with USAID?
- 2. What can you tell me about the activities and achievements of MWA-EP?
- 3. In what ways, if any, did the MWA-EP approach differ from other WASH projects before it?
  - a. PROBE: What do you think of that approach?
- 4. Are you aware of the degree to which MWA-EP WASH outcomes in particular were sustained since it closed 8 years ago?
  - a. PROBE: Any guesses? Why?
- 5. What factors influenced the ability of MWA-EP project interventions to sustain WASH facilities and behaviors? Why?
  - a. PROBE: What does it take to reach sustained use of water points, latrines, handwashing with soap in rural Ethiopia and in particular in SNNPR, Oromia, Amhara?
- 6. What is particular to Ethiopia that we should be aware of that may have impacted the sustainability of MWA-EP? If yes, how has USAID taken this into account in WASH programming since 2009?
- 7. Are there any particular aspects of MWA-EP that you think we should look at closely in our study?
- 8. Based on your experience with WASH in Ethiopia, what are the biggest threats to sustainability for access to water, sanitation and hygiene projects?
  - a. FOLLOW-UP: Where have you seen evidence of that? Anything in the context of MWA-EP?
- 9. Have you seen any promising programmatic strategies to improving sustainability of WASH outcomes in Ethiopia? Describe.

## c. Key Informant Interview with Woreda/Kebele Water Office

# Name(s): Position(s): M/F Name(s): Position(s): M/F Name(s): Position(s): M/F Date of Interview: Time of Interview: Name of Note-taker:

# MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

## General roles, responsibilities, accountability

Location of interview:

- I. What roles does your office play in supporting water schemes in this woreda/kebele?
  - PROBE on types of training, monitoring, enforcement, repair, regular maintenance
  - FOLLOW-UP: Who at your office is responsible for each activity? How often is each activity done?
  - FOLLOW-UP: How often is each water point visited?
- 2. Who is responsible for ensuring water is safe to drink?
  - How is that done? (Probe on water quality)
- 3. What roles do WASHCOs play in supporting water schemes?
  - PROBE on uncertainties or confusion
- 4. In what ways do you interact with WASHCOs that manage water schemes?
  - PROBE on frequency of interaction, who interacts
- 5. What sort of training do you provide to WASHCOs?
- 6. What changes have there been to the government standards and roles in general across agencies for WASH since 2009?

**INTERVIEWER:** Show a list of MWA-EP schemes of interest and note your special interest in talking about these water points for the remaining questions, if they have knowledge of them. If they cannot remember, it is OK for them to talk in general regarding all water points in the woreda/kebele.

#### Repair

- I. Of these MWA-EP-supported water points, do you know how many of them are currently functional? What, if any, types of problems have been encountered with these water points?
- 2. For these MWA-EP-supported water points, I want to understand how repairs are made and who is involved in each step. Think about the last time one of these became broken and was no longer working. Walk me through what happened next to get it working again.

  PROBE on:
  - What was the problem? How was it discovered?
  - What role did WASHCO, Water Office, others play, and how did they start involvement?
  - How long until each party got involved?

- Who made the repair?
- Were there any challenges to getting labor or parts for this? Why?
- How long did it take to make the repair?
- How was the repair paid for?
- 3. In general, where do supplies come from to fix water points? FOLLOW-UP: How difficult is it to get needed supplies?
- 4. What kind of access is there to technical expertise necessary to perform repairs? FOLLOW-UP: Do you or WASHCOs experience any challenges accessing technical help?

#### **Costs and fees**

- I. Who determines the cost of usage for a water point?
- 2. How, if at all, are the costs of maintenance, repair, and other needs covered for these water points?
- 3. What challenges are there to collecting fees or covering costs, if any?
- 4. What could be done differently to ensure costs are covered?

#### Reflections

- 1. Has your office been successful in supporting these water points?
  - PROBE: what is the individual's definition of success
- 2. What challenges do you face in supporting these water points?
- 3. Is there anything else you'd like to discuss with me?

have been installed in these same areas since 2009? Describe each:

#### Sample "contamination" follow-up

INTERVIEWER: Show a list of MWA-EP schemes of interest along with related kebeles and villages and request as much information as possible about each one.

I. In general, looking at this list of kebeles and villages, are you aware of any new water schemes that

NOTE TAKER: Record all answers.

		_ Village:	_ Implementer (donor):
		_ Village:	_ Implementer (donor):
		_ Village:	_ Implementer (donor):
		_ Village:	_ Implementer (donor):
		_ Village:	_ Implementer (donor):
f. Kebele:	_Got:	_Village:	Implementer (donor):

these same schemes or water points since 2009? Rehabilitated scheme/water point name: Kebele: Got: \_\_\_\_\_ Village: Who rehabilitated it? \_\_\_\_\_ DK a) When? DK b) What did they do? \_\_\_\_\_ Rehabilitated scheme/water point name: Got: \_\_\_\_\_
Village: \_\_\_\_\_ DK Got: a) When? DK b) What did they do? Rehabilitated scheme/water point name: \_\_\_\_\_ Kebele: Got: Village: Village: \_\_\_\_\_ DK

• Who rehabilitated it? \_\_\_\_\_ DK a) When? DK b) What did they do? Rehabilitated scheme/water point name: Got: \_\_\_\_\_ Village: Who rehabilitated it? a) When? DK b) What did they do? \_\_ Rehabilitated scheme/water point name: \_\_\_\_\_ Kebele: Got: \_\_\_\_\_ Village: Who rehabilitated it? \_\_\_\_\_ DK a) When? \_\_\_\_\_ DK b) What did they do? \_\_\_\_

2. For each of these MWA-EP schemes/water points, are you aware of any rehabilitation efforts made to

# d. Key Informant Interview with Woreda/Kebele Health Office Location of interview:

Name(s):	Position(s):	M/F
Name(s):	Position(s):	M/F
Name(s):	Position(s):	M/F
Date of Interview:	Time of Interview:	
Name of Interviewer:	Name of Note-taker:	

# MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

- I. What role does your office play in supporting water schemes in this woreda/kebele? [Free response]
  - PROBE: What responsibility does this office have for monitoring water quality? Water availability?
- 2. Do you interact with WASHCOs that manage water schemes? In what ways?
- 3. Please describe which water points are tested, and what the tests measure. [Free response]
- 4. How often is water quality measured for each water point?
  - At least 12 times per year
  - At least 4 times per year, but less than 12 times
  - More than once per year, but less than 4
  - Once per year
  - Less than once per year
  - Quality is not tested
- 5. What happens when the quality test shows the source exceeds national standards for biological or chemical pathogens? [Free response]
  - PROBE: Who is responsible for fixing the problem?
  - PROBE: How often is the problem addressed? How quickly?
- **6.** What challenges does this office face in providing this support to water schemes? [Free response]
- 7. What other roles, if any, do you play with regard to promoting safe WASH practices in this area? [Free response]

Specify each MWA-EP water scheme and water point you would like to talk about. For each one, request water quality testing records dating back as far as 2009, if available.

Water tests should not exceed:

Fecal coliforms, fecal streptococci, or E. coli: No more than 0 per 100mL Arsenic: No more than 10 parts per billion or 0.01mg/L Fluoride: No more

- 8. Do you have records of past water quality testing for these [MWA-EP] water points I can see? Yes / No
- 9. MWA-EP water point name/location: \_\_\_\_\_

If yes: INTERVIEWER: Note any readings that exceeded national standards (see box):

١.	Year/month:	Item tested:	Reading:	
2.	Year/month:	 Item tested:	Reading:	
3.	Year/month:	 Item tested:	Reading:	
4.	Year/month:	Item tested:	Reading:	
5.	Year/month:	Item tested:	Reading:	

6.	Year/month:	Item tested:	Reading:	_
7.	Year/month:	Item tested:	Reading:	_
8.	Year/month:	Item tested:	Reading:	_
9.	Year/month:	Item tested:	Reading:	_
*		ossible. Describe which years	records are available, frequenc	cy of testing (e.g.
monthly, an	nnual):			
10 8414/4	EDatan baint nam			
		ellocation:		
		y readings that exceeded na		
			Reading: Reading:	
			Reading:	
3. 4	Year/month:	Item tested:	Reading:	-
5	Year/month:	Item tested:	Reading:	_
6	Year/month:	ltem tested:	Reading:Reading:	-
7.	Year/month:	Item tested:	Reading:	_
8.	Year/month:	ltem tested:	Reading:	-
9.	Year/month:	ltem tested:	Reading:	-
			records are available, frequenc	
	-EP water point nam	e/location:		
If yes: I	INTERVIEWER: Note ar	y readings that exceeded na	tional standards (see box):	
Ι.	Year/month:	ltem tested:	Reading:	_
2.	Year/month:	Item tested:	Reading:	_
3.	Year/month:	Item tested:	Reading:	_
4.	Year/month:		Reading:	_
5.	Year/month:	Item tested:	Reading:	_
6.	Year/month:	Item tested:	Reading:	_
7.	Year/month:	ltem tested:	Reading:	_
			Reading:	
			Reading:	
•		ossible. Describe which years	records are available, frequenc	cy of testing (e.g.
monthly, an	nnual):			
10 441474	<b>55</b>	11		
	•	ellocation:		
		y readings that exceeded na		
l.	rear/month:	item tested:	Reading:	-
Z.	Year/month:	item tested:	Reading:	-
3.	rear/month:	item tested:	Reading:	_

4.	Year/month:	Item tested:	Reading:	
		Item tested:		
		ltem tested:		
		Item tested:		
		Item tested:		
		Item tested:		
(INTERVIEV monthly, and		possible. Describe which years r	ecords are available, frequer	ncy of testing (e.g.
	•	mellocation:any readings that exceeded nati		
. ,		Item tested:	,	
		ltem tested:		
		Item tested:		
		Item tested:		
		possible. Describe which years r		
monthly, and		, , , , , , , , , , , , , , , , , , , ,		10, 0, 0000008 (008)
monany, am	nadi).			

## e. Key Informant Interview - MWA-EP Implementer

MWA-EP IP:		Date of Interview:	
Woreda:		Time of Interview:	
Kebele:		Name of Interviewer:	
Got:		Name of Note-taker:	
Name:	Tel	Number:	M/F
Name:		Number:	
Name:	Tel	Number:	M/F

# MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

- 1. What was the nature of your involvement with MWA-EP (2004-2009)?
  - a. Where applicable, what is your relationship to MWA now?
- 2. What types of WASH activities did your organization complete for MWA-EP?
- 3. How did your organization approach the selection of communities and the selection of the implementation approach? Who was involved in the selection process for these two factors?
- 4. From your perspective, which MWA-EP activities were the most successful in terms of achieving WASH adoption outcomes at the time of project completion? Why?
  - a. PROBE: What do you think made those activities successful?
  - b. PROBE: Are there any examples of very successful communities you can highlight? Please describe.
- 5. What, if any, actions were taken during implementation to improve the long-term sustainability of the WASH activities or benefits? Please describe.
  - a. What worked well for enabling sustainability of outcomes?
  - b. What were some of the major challenges?
- 6. In your experience in Ethiopia, what are some of the challenges to achieving long-term sustained WASH infrastructure?
  - a. PROBE: How do things typically change after implementation is over- looking back one, two, or eight years later?
  - b. PROBE: Ensure they address both infrastructure sustainability and behavior change sustainability.
- 7. What about sustaining good hygiene behavior? What are the challenges to achieving targeted behaviors for the long term?
  - a. PROBE: How do things typically change after implementation is over- looking back one, two, or three years later?
  - b. PROBE: Ensure they address both hygiene structure (e.g. handwashing station) sustainability and behavior change sustainability.
- 8. Do you or your organization still have any contact with the villages your organization targeted for MWA-EP, either formal or informal? If so, what types of contact or project monitoring are occurring?
  - a. FOLLOW-UP: What, if anything, do you know about what happened in those villages since the project ended 8 years ago, related to WASH and any other changes.

- 9. Are you aware of any new programs from other donors that occurred in the same kebeles within the past three years?
- 10. Is there anything your organization does differently today to improve long-term sustainability, based on lessons you've learned from MWA-EP? If so, please describe the changes made and why.
- 11. Do you have any other thoughts to share about MWA-EP or these general issues?

# f. Key Informant Interview on Household and Shared Community Latrine Use

MWA-EP IP:	Village:
Woreda:	Date of KII:
Kebele:	Interviewer Name:
Got:	Notetaker Name:
Respondent I: Name:	Gender: Age:

# MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

#### Reason for selection as KII respondent:

- a) Observed using latrine
- b) Living nearby latrine
- c) Owner of the latrine (for household latrines)

#### Latrine block characteristics

١.	When was this/these	latrine(s) constructed?	DK
2.	Who constructed it?	DK	

- 3. Since the time [organization] did this work, has any other outside group come to do any water or sanitation work with you or others in the community? If so, when did this occur and what did that organization do?
- 4. How common is it for people in this community to have a HH latrine?

#### **User characteristics**

- 1. How often do you use this latrine vs using another latrine or another location (such as a field)?
  - a. If not always: Where else do you go when you need to urinate or defecate? Why?
- 2. How satisfied are you with this/these latrine(s)? Why?
  - a. Probe: Satisfaction with reliability
  - b. Probe: Satisfaction with quality of service
  - c. Probe: Satisfaction with quantity of water provided
  - d. Probe: Satisfaction with cleanliness and comfort
- 3. Since this/these latrine(s) were built, have others invested in their own latrine? From your perspective, why have they/why have they not?

#### **Handwashing**

- 1. Was the handwashing station built at the same time as the latrine?
- 2. How frequently do you observe people washing their hands with soap/ash and water after using the latrine?
- 3. When the latrine was built, did the organization provide any lessons or training on handwashing practices?
- 4. From your perspective, why might people not always wash their hands after using the latrine?

#### Maintenance, Cleaning, and Repair

- 1. Who is responsible for the cleaning, maintenance, and repair of the latrine(s)?
  - a. Probe: Ask about all three components in case there are different people responsible for different aspects
- 2. To what extent are the latrines cleaned and maintained on a regular basis? Are there any issues that have arisen? If so, what are they?
- 3. Who pays for the cleaning, maintenance, and repair of the latrine(s)?
- 4. What are the biggest challenges to maintaining a clean and properly functioning latrine for people to use? Is there anything an organization might be able to do to make this easier?

#### For Communal Latrines Only: Fees

- 1. Where does the money come from to do repairs on these latrines?
- 2. Please describe all the fees that people pay to use this latrine.

a.	Annual fee:
b.	Fee per use:
c.	Other fee (describe):

- 3. Who is responsible for collecting fees?
- 4. How are these fees collected?
- 5. Are there any users who do not pay prescribed fees, or not pay them regularly?
  - a. Probe: Who are these people?
  - b. Probe: Why don't they pay?
- 6. Are there any other sources of money coming to this latrine?
  - a. If yes: Describe

## g. Group Interview with Shared Community Latrine Management

MWA-EP IP:	Village:				
Woreda:	Date of GI:				
Kebele:	Interviewer Name:				
Got:	Notetaker Nam	e:			
Respondent I: Name:	Role in Management:	M/F Age:			
Respondent 2: Name:	Role in Management:	M/F Age:			
Respondent 3: Name:	Role in Management:	M/F Age:			

# MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

#### Latrine block characteristics

١.	When was this latrir	e block constructed?	DK
2	Who constructed it	, Γ	)K

- 3. Since the time [organization] did this work, has any other outside group come to your community to do sanitation work? Yes / No / DK
  - a. If yes: Describe [Free response]
- 4. Do most people in this community have a HH latrine?
- 5. How satisfied do you think users are with this shared latrine?

#### User characteristics

- I. Who uses these latrines and why? Are there any people or groups of people who do not use it? If so, why?
- 2. Approximately how many people use the latrines each day?

#### **Hand Washing**

- I. Is there a handwashing station available to users of the latrine? If not, was there one at the time the latrines were built? If so, what happened to it?
- 2. How frequently do you observe people washing their hands with soap/ash and water after using the latrine?
  - a. Probe: What reasons do you think there are for why people might not always wash their hands afterwards?

#### Repair, Maintenance, and Cleaning

- 1. How are maintenance and repairs of the latrines handled?
  - a. Probe: Who is responsible?
  - b. Probe: What are the processes in place?
- 2. What are the primary problems or issues encountered in managing the latrines? How has the committee solved those issues?
  - a. Probe: Approximately how long does it normally take to resolve maintenance and repair issues?

- 3. What type of support, if any, is provided by the government water office? What has been your experience working with the water office?
  - a. Probe: What has worked well in these interactions?
  - b. Probe: What challenges have you encountered?
- 4. How are maintenance and repairs paid for?

#### **Fees**

١.	What,	if any, fees are collected to support the cleaning, maintenance, or repair of the latrines
	[Free re	esponse]? [If needed, probe on the following types of fees]
	a.	Annual fee:
	b.	Fee per use:
	c.	Other fee (describe):
2	1.1	

- 2. How much money is spent per month to manage the latrines? How much does this vary over time?
- 3. To what extent are the expected fees actually paid by users? What is the recovery rate for the fees (if known)?
- 4. To what extent are the fees collected sufficient to cover the actual costs?
  - a. Probe: What expenses can be covered by the fees?
  - b. Probe: What expenses aren't able to be covered by the fees if there are insufficient funds?

## h. Group Interview with Two to Three WASHCO Members

Name of water scheme:	village:	
MWA-EP implementer:	Scheme mana	nged by:
Woreda:	_ Contact num	ber for one respondent:
Kebele:		(name)
Got:		
	Role on WASHCO:	
Respondent 2: Name:	Role on WASHCO:	M/F Age:
Respondent 3: Name:	Role on WASHCO:	M/F Age:
	NSENT STATEMENT AND GAI	
	SPONDENTS BEFORE PROCEE	DING
Water point characteristics		
	neme/point constructed? D	K
2. Who constructed it?	DK	
3. Has it been rehabilitated	in any major way since it was constru	cted? Yes / No / DK
4. Who rehabilitated it?	DK	
5. When? DK	was constructed, has any other outsid	e group come to improve this
	er water and sanitation work in your	
did they do?		
	nk the community is with this water p	oint? [Free response]
User characteristics		
I How many households up	se this source? (estimate if not sure):	
	cally have to wait in line in order to p	
Water quantity		
I. If known, what is the typi	cal flow rate for this water point in lit	ers per minute? DK
	of water from this water point suffici	
not, what do people do?		
Water quality		
Do you consider water fi	rom this source to be safe to drink? V	Vhy?
•	ter quality measured for this water po	•
a. At least 12 time	1 /	
	per year, but less than 12 times	
	per year, but less than 4	
d. Once per year		
e. Less than once p f. Quality is not te	•	
i. Quality is flot to	SIEU	

- 3. What happens if the quality test shows there are values outside the norm (such as presence of fecal bacteria, high levels of fluoride or arsenic, etc.)?
- 4. Do you have records of past water quality testing I can see? Yes / No (INTERVIEWER: Take a photo or a photocopy if possible. Describe which years records are available, what characteristics have been tested, the frequency of testing (e.g. monthly, annual), etc.

Water tests should not exceed:

Fecal coliforms, fecal streptococci, or E. coli:

No more than 0 per 100mL

**Arsenic:** No more than 10 parts per billion or 0.01 mg/L

Fluoride: No more than 0.5 mg/L

a.	If yes: I	<b>NTERVIEWER</b>	: Note any readings that exc	ceeded national standards (see box):
	i.	Year/month:	Item tested:	Reading:
	ii.	Year/month:	Item tested:	Reading:
	iii.	Year/month:	Item tested:	Reading:
	iv.	Year/month:	ltem tested:	Reading:
	٧.	Year/month:	Item tested:	Reading:
	vi.	Year/month:	Item tested:	Reading:
	vii.	Year/month:	ltem tested:	Reading:
	viii.	Year/month:	Item tested:	Reading:
	ix.	Year/month:	ltem tested:	Reading:

#### **Maintenance and Repair**

- I. Who is responsible for monitoring the function of this water point? What, if any, role does the Water Office play?
- 2. How frequently are repairs needed? What are the most frequent problems?
- 3. What are the primary challenges you face in ensuring that the water point is functioning properly at all times?

#### Fees

- I. What sources of funding are available to the WASHCO? How much is received from different sources?
- 2. If there are usage fees, please describe them.

a.	Annual fee:	
b.	Fee per use:	per IOL container/ 20L container/other (write in):
c.	Other fee (describe):	

- 3. To what extent do people actually pay the fees they owe? If known, what is the fee recovery rate?
- 4. To what extent do the fees collected cover the actual costs for maintaining and repairing the water scheme? If there is a gap in funding, how large is it, and how do you handle that gap?
- 5. Do you keep any records on payment? Can we see them?

#### Reflection on changes

- I. To what extent have the ways in which the WASHCO manages the water scheme changed over the last several years since the scheme was built? How has it changed? Has it been for the better or the worse?
- 2. Is there anything else you'd like to discuss with me about this water point or the organization that installed it?

## i. Structured Group Interview with One or Two Water Collectors

Name of water scheme:		Got: Village:	nt managed by:
Respondent	Gender	Age	# years living here
Person I			
Person 2			

# MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

#### Usage patterns

- I. How often do you come to this water point?
- 2. How much time do you typically spend waiting to get water each time?
- 3. Do you ever supplement with water from any other sources to meet your HH daily needs? If so, why and from which sources?
- 4. Does the quantity of water from this source meet your daily needs?
  - a. Is this true at all points in the year or does this vary by season?
- 5. What do you use this water for?
- 6. Do you feel this water is safe to drink? Why or why not?
- 7. Do all people in this community have equal access to use this source? Why?
- 8. Which people do not use this source? Why?
  - a. PROBE on wealth/gender/vulnerable populations

#### **Management**

- I. Who manages this water point?
- 2. How well do you think it is being managed? Why?
  - a. PROBE: What are they doing well?
  - b. PROBE: What should they do differently?
- 3. Have there been any problems with the functionality of the water point? If so, what problems? And how were those problems dealt with, and by whom?
- 4. What did you do when the water point wasn't available?
- 5. What kind of changes have you noticed, if any, in the way this water point is managed or repaired over time?

#### **Finance**

- I. How much do you pay to use this water? To what extent is this price affordable for you and your family?
- 2. Do all people pay the same? If not, why not?
- 3. How has the price changed, if at all, over the past 8 years?
- 4. Is there anything else you'd like to tell me about this water point or how it is managed?

## 2. Structured Observation Forms

## a. Structured Observations at Water Points

Name of water scheme:	Village:
MWA-EP implementer:	
Woreda:	Local contact number:
Kebele:	Scheme managed by:
Got:	Type of scheme
Number of water points connected to this	schomo
If water points managed separately, list man	
Observations at water source (if sepa	rate from water point(s))
Observations at water point I	
I. How many people are waiting at the w	ater point?
, , , ,	ueue to be filled? (Identify type of container to determine
volume)	
3. Describe who is gathered at the water	point (e.g. gender, age)
4. Are there washing basins?	
5. If yes: Is there evidence these are being	used?
6. Are there cattle troughs?	
If yes: Is there evidence these are being	used?
7. Is the water point currently dispensing	
8. If handpump: Note the number of strol	,
•	ch to measure the time it takes to fill the container with water. If
this is a handpump, also count the numbe	
10. Number of seconds to fill 20 liters:	
11. Number of strokes to fill 20 liters:	
12. Note the severity of any apparent water	
13. Note any apparent repair or maintenar	
14. Comment on overall challenges or three	eats
Observations at water point 2 (repeat	questions for up to 4 water points)
Observations at water point 3	
Observations at water point 4	

## b. Structured Observations of Household Latrines

MV	/A-EP implementer: k	Cebele:
Wo		Got: /illage:
fam latri	rk with the village chief or other knowledgeable person to it ily due to participation in MWA program with USAID fund ne block and complete the following observations.	dentify which latrines were constructed by the
Lat	rine I:	
1.	Was this latrine constructed by the HH during the MWA-EP project?	Yes / No / Don't Know
2.	When was this latrine constructed? DK	Year: Don't Know
3.	Gender designation:	Females / Males / Not specified (any able to use)
	3.1. If there is gender designation: Is this latrine separated from the other gender (by wall or distance)?	Yes / No
4.	Type of latrines	<ul> <li>a) VIP</li> <li>b) Pour flush</li> <li>c) Traditional, washable slab</li> <li>d) Traditional, non-washable slab</li> <li>e) Arborloo</li> <li>f) Other (describe):</li> </ul>
5.	Total number of stalls in latrine block:	Number:
	5.1. Latrine is open for use (unlocked):	Yes / No
	5.2. Is there clear evidence latrine is being used (note odor, contents of pit, observed use):	Yes / No Notes:

	5.3. Does latrine offer full privacy (walls and doors that can fully close):	Yes / No
	5.4. Door locks from inside?	Yes / No
	5.5. Safe construction (secure slab, lack of crumbling walls or roof):	Yes / No
	,	Notes:
	5.6. Easily usable for individuals with physical disabilities (e.g. no stairs, rails or devices inside for support, seat):	Yes / No
	5.7. Cleanliness: Acceptable cleanliness (not soiled with urine, feces, or used paper):	Yes / No
	5.8. Odor: Acceptable odor (no smell or mild, tolerable smell):	Yes / No
		Notes:
	5.9. Flies: Are fewer than 3 flies present:	Yes / No
6.	Are materials for anal cleansing (paper or water container) available in or near any stalls?	Yes / No
7.	Take photo	
8.	Notes:	

Latrine block 2: (repeat questions above for up to 8 latrines)

Latrine block 3:

Latrine block 4:

**Latrine block 5:** 

Latrine block 6: Latrine block 7: Latrine block 8:

Handwashing facilities

Паі	idwasiiiig iaciiities	
Ι.	Are there any containers designated for handwashing, whether full or not?	Yes / No
2.	Take photo of container	
3.	Where are the containers located? (circle all that apply)	I.I. Near latrine I.2. Other (describe):
4.	Is there water for handwashing today in any of the containers?	Yes / No
5.	Is there soap for handwashing today at any of the containers?	Yes / No
6.	Is there evidence that handwashing is happening today (e.g. ground or soap is wet)?	Yes / No
7.	Did you observe anyone washing their hands today? If yes, note gender/age	Yes / No
		Notes:
8.	Did you observe anyone using the latrine and not washing their hands today? If yes, note gender/age	Yes / No
		Notes:

## c. Structured Observations of Shared Community Latrines

MWA-EP IP:	
Woreda:	
Kebele:	
Got:	
Village:	
Date of Obs:	
Time of Obs:	
Name of Observer:	
Work with the village chief or other knowledgeable person to	identify which latrines were constructed by the
MWA partner with USAID funding, when each was construct	· ·
block. Visit each latrine block and complete the following obs	
, , , , , , , , , , , , , , , , , , , ,	
Latrine block I:	
I. Was this block constructed by MWA-EP project?	Yes / No / Don't Know
2. When was this block constructed?	
2. When was this block constructed?	Year:
	Don't Know
	Bont Know
3. Gender designation:	Women / Men / Not specified (any able
	to use)
	,
a) If there is gender designation: Is this latrine	Yes / No
block separated from the other gender (by	
wall or distance)?	
4. Type of latrines	a) VIP
	h) Davidush
	b) Pour flush
	c) Traditional, washable slab
	c) Traditional, Washable slab
	d) Traditional, non-washable slab
	,
	e) Other (describe):
5. Total number of stalls in block:	Number:
a) Number of stalls open for use (unlocked):	Number:
b) Number of stalls observer was able to enter	N. I
b) Number of stalls observer was able to enter	Number:

	c)	Number of stalls with clear evidence they are being used (note odor, contents of pit,	Number:
		observed use):	
	d)	Number of stalls offering full privacy (walls and doors that can fully close):	Number:
	e)	Number of stalls with doors that lock from inside:	Number:
	f)	Number of stalls with safe construction (secure slab, lack of crumbling walls or roof):	Number:
	g)	Number of stalls easily usable for children and persons with physical disabilities (e.g. no stairs, rails or devices inside for support, seat, small hole):	Number:
	h)	Cleanliness: Number of stalls with acceptable cleanliness (not soiled with urine, feces, or used paper):	Number:
	i)	Odor: Number of stalls of acceptable odor (no smell or mild, tolerable smell):	Number:
	j)	Flies: Number of stalls with minimal flies (0-3):	Number:
6.		e materials for anal cleansing (paper or water stainer) available in or near any stalls?	Yes / No
7.	Did tod	you observe anyone using these latrines ay?	WomenMenGirl children
			Boy children
8.	Tak	e photo	Boy children

Latrine block 2: (repeat questions above for up to 4 blocks)

## Latrine block 3:

#### **Latrine block 4:**

## Handwashing facilities

10. Are there any containers designated for handwashing nearby, whether full or not?	Yes / No
11. Take photo of container	
12. Where are the containers located? (circle all that apply)	a) Near latrines
	b) Other (describe)
13. Is there water for handwashing today in any of the containers?	Yes / No
14. Is there soap for handwashing today at any of the containers?	Yes / No
15. Is there evidence that handwashing is happening today (e.g. ground or soap is wet)?	Yes / No
16. Did you observe female users washing their hands today?	Yes / No
17. Did you observe male users washing their hands today?	Yes / No

#### 3. Interview Guides: Amharic

# a. Informed Consent Statement to be Used for All Data Collection Efforts (Interviews, Focus Group Discussions) (Amharic)

መረጃ ለመሰብሰብ ጥረት በሚደረግ ጊዜ ሁሉ ጥቅም ላይ የሚውል ፤ መረጃ ሰጪዎች ስለሚሳተፉበት ቃለመጠይቅ በቂ ግንዛቤ አግኝተውና ተረድተው ስምምነታቸውን የሚሰጡበት መግለጫ፡ (ቃለመጠይቆች ፤ የቡድን ውይይቶች)

ጤና ይስተልኝ! እዚህ የመጣነው ኢኮዲት (ECODIT) የተባለ የአሜሪካ ቡድን ወክለን ሲሆን ዩ.ኤስ.ኤ.አይ. ዲ (USAID) ከ1996 እስከ 2001 ድረስ የተገበረውን የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ፕሮጀክት የስራ እንቅስቃሴ በተሻለ እንዲረዳው ለማድረግ የሚከናወን ጥናት ነው፡፡ ይህንን ጥናት የሚያካሂደው ቡድን የሚሊኒየም ወተር አሊያንስ ፕሮጀክት ትግበራ አካል አልነበረም፡፡ እኛ ገለልተኛ ገምጋሚዎች/መዛኞች ስንሆን እዚህ የተገኘነው በፕሮጀክቱ የተከናወኑ ስራዎች እና ያስገኙት ጥቅም ፕሮጀክቱ ከተጠናቀቀ በኋላ ምን ያህል በዘላቂነት እንደቀጠሉ ለመረዳት ነው፡፡

በዚህ ግምነማ/ምዘና የተወሰኑ የፕሮጀክቱ ጣቢያዎችን ለመነብኘት የመረጥን ሲሆን በኩብኝታችንም በፕሮጀክቱ የተነነቡ የውሃ ጣቢያዎች አገልግሎት በመስጠት ላይ መሆናቸውን እና ከውሃ አቅርቦት ስራው ጋር ተያያዠነት ያላቸው ተግባራት በዘላቂነት እየተከናወኑ መሆናቸውን ለማወቅ/ለመረዳት አቅደናል። እዚህ የሚገኙ የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ስራዎቻችሁ እና የተገኙ ውጤቶችን ዘላቂ ለማድረግ እንዳይቻል እንቅፋት ፌጥረው ሊሆኑ የሚችሉ ምክንያቶች ካሉ የበለጠ ለማወቅ እንዲያስችለን ልናነጋግርዎት እንፌልጋለን። ይህ መረጃ ዩ.ኤስ.ኤ.አይ.ዲ (USAID) ወደፊት በመላው ኢትዮጵያ የሚሰራቸውን ስራዎች እንዲያሻሽል ሊረዳው ይችላል። በዚህ ፕሮጀክት ላይ ተሳትፎ የነበርዎት በመሆኑ እነዚህን ጉዳዮች ለመረዳት እንዲያስችለን በዚህ ቃለመጠይቅ እንዲባተፉ እና አስተያየትዎን እንዲያካፍሉ ጋብዘንዎታል። አላማችን የተገኙ ውጤቶች ዘላቂነት እንዲኖራቸው የረዱ ነገሮች ምን እንደሆኑ እና በሌላ በኩል ደግሞ የተገኙ ውጤቶች ዘላቂነት እንዲያፍራቸው እንቅፋት የሆኑ ነገሮች ምን እንደሆኑ ለማወቅ ስለሆነ ትክክል ወይም ስህተት የሚባል መልስ ባለመኖሩ አስተያየትዎን በነፃነት እንዲባልፁ እንፌልጋለን።

ይህ ውይይት ወደ አንድ ሰዓት ይወስዳል፡፡ በዚህ ቃለምልልስ ለመሳተፍ ባይፈልጉ የሚደርስብዎ ምንም ዓይነት ቅጣት ወይም ቸግር አይኖርም፡፡ በውይይቱ ቢሳተፉ የሚያሰጋዎት ምንም ዓይነት ነገር የለም፡፡ ለመሳተፍ ከመረጡም እነዚህ ስራዎች በሌሎች የኢትዮጵያ አካባቢዎች በተሻለ ሁኔታ እንዲተገበሩ እገዛ እያደረጉ ከመሆንዎት ባለፌ ሌላ ለእርስዎም ሆነ ለመስሪያቤትዎ የሚያገኙት ቀጥተኛ የሆነ ተቅም የለም፡፡

በዚህ ቃለመጠይቅ ቸግር ሊፌጥሩ የሚቸሉ/አወዛጋቢ ርዕሰ ኍዳዮችን አናነሳም፡፡ ቢሆንም የዚህ ጥናት ግኝቶች ተጠናቅረቀው በሚፃፉ ጊዜ ስምዎትን ከሰጡን አስተያየት ጎን አናስቀምጥም፡፡ ነገር ግን በአንዳንድ ኍዳዮች ላይ የመስሪያ ቤትዎን ስም መጥቀስ ሊያስፌልገን ይቸል ይሆናል፡፡ ድምፅዎ ሳይቀዳ እንድንወያይ የሚፈልጉት ማኛውም ነገር ካለ ያሳውቁኝ እኔም መቅረፀ ድምፁን በጣቆም እና የመስሪያ ቤትዎን ስም ባለመጥቀስ ፍላጎትዎን አከብራለሁ፡፡ ነፃ ሆነው አስተያየትዎን እንዲገልፁ እንፌልጋለን፡፡ ለመመለስ የጣይፈልጉት ጥያቄ ካለ ያለምንም ቸግር አልመልስም ማለት ይችላሉ፡፡

<b>ይጠይቁ፡</b>
<b>ይጠይቁ፡</b> መሳተፍ ይፈል <i>ጋ</i> ሉ?
<b>ይጠይቁ:</b> ድምፅዎን ብንቀዳ ፌቃደኛ ነዎት?
ስ <mark>ለቃለመጠይቁ አላማ ለማስረዳት እና የተጠያቂውን ስምምነት ለማግኘት የተደረገው ውይይት ተጠናቋል? አዎ</mark> (የቃለመጠይቅ አድራጊው ፊርማ)
<b>ለመሳተፍ ተስማምተዋል?</b> አዎ አይ (ካተስማሙ ቃለመጠይቁን ያቁሙ)

# b. Key Informant/Group Interview – USAID Employee (Amharic) ከዩ.ኤስ.ኤ.አይ. ዲ (USAID) ሰራተኛ ዋና መረጃ ሰጪ/ ከቡድን *ጋ*ር የሚደረባ ቃለመጠይቅ

ቃለመጠይቅ የሚደረባበት ቦታ:

ስም (ስሞች)፡	የስራ መደብ (መደቦች):	ወ/ሴ
ስም (ስምቾ):	የስራ	ወ/ሴ
ስም (ስሞቸ):	የስራ	ወ/ሴ
ቃለመጠይቅ የተደረገበት ቀን ፡	ቃለመጠይቁ የተደረገበት ሰዓት:	
የቃለ <i>መ</i> ጠይቅ አድራጊ ስም:	ማስታወሻ የሚይዘው ሰው ስም:	

#### ወደ ቃለመጠይቁ ከመባባትዎ በፊት የስምምነት መጠየቂያ መባለጫውን አንብበው ከሁሉም መረጃ ሰጪዎች ስምምነት ማግኘት አለብዎት

#### ጥያቄዎች (6)

- 1. ከ1996 እስከ 2001 ዓ.ም በተተገበረው የሚሊኒየም ወተር አሊየንስ ኢትዮጵያ (MWA-EP) ፕሮጀክት ውስጥ የነበርዎት ተሳትፎ ምን ነበር?
- υ. ሚሊኒየም ወተር አሊያንስ ኢትዮጵያን (MWA-EP) ፕሮጀክትን የማያውቁት ከሆነ አሁን በዩ.ኤስ.ኤ.አይ. ዲ (USAID) ውስጥ የሚሰሩትን ስራ መቼ ጀመሩ?
- 2. ስለሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) የስራ እንቅስቃሴዎች እና ስኬቶች ምን ሊነባሩኝ ይቸላሉ?
- 3. የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) የአሰራር ዘዴ ቀደም ብለው ከነበሩ ከሌሎች የውሃ ፣ የአካባቢና እና የግል ንፅሀና (WASH) ፕጀክቶች የሚለይ ከሆነ የሚለየው በምን ምንባድ ነው?
  - *ህ. የማውጣሜ ተያቄ*. ስለአሰራር ዘዴው ምን ያስባሉ?
- 4. የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) የውሃ ፣ የአካባቢ እና የግል ንፅህና (WASH) ፕሮጀክት ከ8 ዓመት በፊት ተጠናቆ ከተዘጋ በኋላ በተለይ በፕሮጀክቱ የተገኙት ውጤቶች ምንያህል ዘላቂ ሆነው እንደቀጠሉ የሚያውቁት ነገር አለ? ህ. የማውጣጫ ጥያቄ በግምት ሊነግሩኝ ይችላሉ? ለምን?
- 5. በሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ፕሮጀክት ትግበራዎች የተከናወኑ የውሃ ፣ የአካባቢና የግል ንፅህና (WASH) ስራዎችና የአገልግሎቱ ተጠቃሚዎች መጡትን የባህሪ ለውጥ ዘላቂነት እንዲኖራቸው ያስቻሉት ምክንያቶች ምንድን ናቸው? ለምን?
  - ህ. *የማውጣጫ ጥያቄ*: በኢትዮጵያ የገጠር አካባቢዎች በተለይም በደቡብ ብሔር ብሔረሰቦች እና ሕዝቦች ክልል ፣ በኦሮሚያ እና በአማራ ክልል ሰዎች እጃቸውን በሳሙና እንዲታጠቡ ፣ የውሃ ጣቢያዎችን እና መፀዳጃ ቤቶችን በዘላቂነት እንዲጠቀሙ ለማድረባ ምን ማድረባ ያስፈልጋል?
- 6. የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ፕሮጀክት ዘላቂ እንዲሆን አስተዋፅኦ አድርን ሊሆን የሚችልና በኢትዮጵያ ነባራዊ ሁኔታ ብቻ ውጤታማ የሆነ እና ይህንን ጥናት የምናከናውን ሰዎች ልናውቀው የሚገባ የተለየ ምክንያት አለ? ምንድን ነው? ካለስ ዩ.ኤስ.ኤ.አይ. ዲ (USAID) ይህን የተለየ ምክንያት ከ2001 ጀምሮ በሚከናወነው የውሃ ፤ የአካባቢ እና የግል ንፅህና (WASH) ፕሮግራም አሰራር ውስጥ እንዲካተት ወይም ከግምት ውስጥ እንዲገባ አድርጓል?
- 7. በጥናታችን በቅርበት ወይም በትኩረት ልናያቸው ይገባል ብለው የሚያስቧቸው የተለዩ የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ ገፅታዎች አሉ?
- 8. በኢትዮጵያ ውስጥ ከውሃ ፤ የአከባቢ እና የግል ንፅህና (WASH) ጋር በተያያዘ ካለዎት ልምድ በመነሳት የውሃ አቅርቦት ፤ የአካባቢ እና የግል ንፅሕና ፕጀክቶች ዘላቂነት እንዳኖራቸው ከፍተኛ ስጋት/እንቅፋት የሆኑ ነገሮች ምንድን ናቸው?
  - υ. *የስትትል ተያቄ፡* ለዚህ ማስረጃ የሚሆን ነገር የተመለከቱት የት ነው! ከሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ፕሮጀክት *ጋ*ር በተያያዘ ያዩት/የተመለከቱን ነገር አለ
- 9. በኢትዮጵያ ከውሃ ፣ ከአካባቢ እና ከግል ንፅህና (WASH) ፕሮጀክቶች የተገኙ ውጤቶችን ዘላቂነት የሚያሻሽሉ ተስፋ ሰጪ አሰራሮች ተመልክተዋል? ያብራሩ

# c. Key Informant Interview with Woreda/Kebele Water Office (Amharic)

ከወረዳ ወይም ከቀበሌ የውሃ ጽ/ቤት ዋና መረጃ ሰጪ ጋር የሚደረግ ቃለመጠይቅ

<u>የ</u> ቃለመጠይዋ ቦታ:		
ነም (ስሞች):	የስራ መደብ (መደበች):	<i>መ</i> /ሰ
ነም (ስሞቾ):	የስራ መደብ (መደቦች):	 の/ሰ
ነም (ስሞቾ):	የስራ መደብ (መደቦች):	መ/ሰ
ቃለ <i>መ</i> ጠይቅ የተደረ <i>ገ</i> በት ቀን:	ቃለመጠይቅ የተደረገበት ሰዓት:	
ያቃለ <i>መ</i> ጠይቅ አድራጊ ስም፡	ማስታወሻ የሚይዘው ሰው ስም:	

#### ወደ ቃለመጠይቁ ከመባባትዎ በፊት የስምምነት መጠየቂያ መባለጫውን አንብበው ከሁሉም መረጃ ሰጪዎች ስምምነት ማግኘት አለብዎት

አጠቃላይ ሚናዎች ፣ ኃላፊነቶች ፣ ተጠያቂነት

- 1. የውሃ ጽ/ቤቱ በዚህ ወረዳ ወይም ቀበሌ የውሃ አቅርቦትን ለማዳረስ ተወጥነው የሚተገበሩ ስራዎችን በመደገፍ ረገድ ምን ሚናዎችን ይጫወታል?
  - *የማውጣጫ ጥያቄ፣* በዚህ የውሃ አቅርቦት ትግበራ ውስጥ ምን ዓይነት ስልጠናዎች እንደተሰጡ ፣ ስለክትትል ፣ የውሃ አቅርቦትን ለማዳረስ የተወጠኑ እና እየተተገበሩ ያሉ ስራዎችን ስለማስፌፀም ፣ ስለ ጥገና እና የውሃ ጣቢያውን ባለበት ጠብቆ ለማቆየት በመደበኛነት ስለሚከናወኑ ተግባራት እያውጣጡ ይጠይቁ
  - **የከትትል ጥያቄ፡** እነዚህ ከላይ የተጠቀሱትን ተግባራት እንዲሰራ ኃላፊነት የተሰጠው ጣን ነው! እያንዳንዱ ስራ በምን ያህል ጊዜ ይከናወናል!
  - **የከትትል***ጥያቄ፡* **እ**ያንዳንዱ የውሃ ጣቢያ በየስንት ጊዜው ይጎበኛል?
- 2. ውሃው ለመጠጥነት አስተማማኝ መሆኑን የሚያፈጋባጠው ማነው?
  - ይህ የውሃ ጥራት ጣረ*ጋገጫ እ*ንኤት ይከናወናል? (ስለውሃ ጥራት የጣውጣጫ ጥያቄ ይጠይቁ)
- 3. የውሃ ፤ የአካባቢ እና የግል ንፅህና ኮሚቴዎች የውሃ አቅርቦትን ለማዳረስ የተነደፉ እና እየተተገበሩ ያሉ ስራዎችን በመደገፍ ረገድ ምን ሚናዎችን ይጫወታሉ?
  - የውሃ ኮሚቴዎች ከሚሰጡት ደጋፍ ጋር ተያይዞ ባራ መጋባት እና እርባጠኝ ያለመሆን ካለ ያውጣጡ
- 4. የውሃ አቅርበትን ለማዳረስ የተነደፉ እና እየተተገበሩ ያሉ ስራዎችን ከሚያስተዳድሩት ከውሃ ፣ የአካባቢ እና የግል ንፅህና ኮሚቴዎች (WASHCOs) ጋር በምን ዓይነት መንገዶች ግንኙነት ታደርጋላችሁ?
  - በምን ያህል ጊዜ ሕንደሚገናኙ ሕና፣ ግንኙነቱ በማን ሕደሚደረባ ያውጣጣጡ
- 5. ለውሃ ፣ የአካባቢ እና የባል ንፅህና ኮሚቴዎች (WASHCOs) ምን ዓይነት ስልጠና ትሰጣላችሁ?
- 6. ከ2001 ወዲህ በተለያዩ ድርጅቶች የሚተገበሩ የውሃ ፣ የአካባቢ እና የግል ንፅህና ፕሮግራሞች በሙሉ በመንግስት የሚተገበረውን የውሃ አቅርቦት ደረጃ ላይ ምን አይነት ለውጦችን አመጡ? መንግስት በውሃ አቅርቦት ረገድ ባለው ተሳትፎ ላይስ ምን ለውጦች አመጡ?

ቃስመጠይቅ ኢድራጊ፣ ሲወያዩባቸው የሚፈልጓቸውን በሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) የተገነቡ የውሃ ጣቢያዎች ዝርዝር ለተጠያቂዎች ያሳዩ፡፡ ተጠያቂዎች ሕክዚህን የውሃ ጣቢያዎች የሚያውቋቸው ከሆነ የሚቀጥሉትን ፕያቄዎች በሕክዚህ የውሃ ጣቢያዎች በተመለከተ የማድረግ ልዩ ፍላጎት ሕንዳለዎት ያስንንዝቧቸው፡፡ ሕክዚህን የውሃ ጣቢያዎች የማያስታውሷቸው ከሆነ ግን በሕጠቃላይ በወረዳው ወይም በቀበሌው ስለሚንኙ የውሃ ጣቢያዎች በሙሉ ቢያወሩ ምንም አይደለም፡፡

#### ጥገና

7. ከእነዚህ በሚሲኒየም ወተር አሲያንስ ኢትዮጵያ (MWA-EP) ድጋፍ ከሚደረግላቸው የውሃ ጣቢያዎች ውስጥ በአሁኑ ወቅት ምን ያህሉ አገልግሎት እየሰጡ እንደሚገኙ ያውቃሉ? በእነዚህ የውሃ ጣቢያዎች ላይ ጣንኛውም ዓይነት ችግር ደርሶ የሚያውቅ ከሆነ ችግሮቹ ምንድን ናቸው?

8. ለእነዚህ በሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ድጋፍ ለሚደረግላቸው የውሃ ጣቢያዎች ጥገናዎች እንኤት እንደሚደረጉ እና በተገናው ሂደት በየደረጃ ማን እንደሚሳተፍ መረዳት እፈልጋለሁ፡፡ እስኪ ከዚህ በፊት ከእነዚህ የውሃ ጣቢያዎች ውስጥ ተሰብረው ከነበሩት እና አገልግሎት መስጠት አቁመው ከነበሩት መካከል ስለ አንዱ ያስታውሱ፡፡ እነዚህ የውሃ ጣቢያዎች መልሰው አገልግሎት መስጠር እንዲጀምሩ ለማድረግ ምን ምን ተግባራት እንደተከናወኑ ይንገሩኝ፡፡

#### በሚከተሉት ላይ የማውጣጫ ጥያቄ ይጠይቁ

- ቸግሩ ምን ነበር? ሕንዴት ሊታወቅ ቻለ?
- የውሃ ፣ የአካባቢ እና የግል ንፅህና ኮሚቴዎች ፣ የውሃ ጸተቤት እና ሌሎች ምን ሚና ተጫወቱ? ተሳትፎ ማድረግስ የጀማሩት እንዴት ነው?
- ሕያንዳንዱ አካል እስኪሳተፍ ምን ያህል ጊዜ ፈጀ?
- የሚጠባን ባለሙያ እና መለዋወሜ እቃዎች በማባኝት በኩል ያጋጠመ ችግር ነበር? ለምን?
- የገናውን ለማድረባ ምን ያህል ጊዜ ፈጀ?
- ለግናው የተከፈለው ሕንዴት ነው?
- 9. በአጠቃላይ ለውሃ ጣቢያዎች ተገና የሚውሉ እቃዎች/አቅርቦቶች የሚመጡት ከየት ነው? *የከትትል ጥያቄ*. ለተገና አስፈላጊ የሆኑ እቃዎችን ለማግኘት ምን ያህል ከባድ ነው?
- 10. ጥገናዎችን ለማከናወን አስፈላጊ የሆኑ የቴክኒክ ሙያተኞችን ምን ያህል ማግኘት ይቻላል? **የከትትል ጥያቄ:** እርስዎ ወይም የውሃ ፤ የአካባቢ እና የግል ንፅህና ኮሚቴዎች የቴክኒክ ድጋፍ በማገኘት ረገድ ማንኛውም ዓይነት ችግር/ተግዳሮት ኢጋጥጧችሁ ያውቃል?

#### ወጪዎችና የአንልግሎት ክፍያዎች

- II. ከአንድ የውሃ ጣቢያ ለመጠቀም የሚከፈለውን ክፍያ የሚወስነው ማነው?
- 12. እነዚህን የውሃ ጣቢያዎች ባሉበት ሁኔታ ጠብቆ ለማቆየት ፣ ለጥገና እና ለሌሎች አስፈላ*ጊ ጉ*ዳዮች የሚውል ወጪ ካለ የሚሸፈነው እንኤት ነው?
- 13. ወጪዎችን ከመሸፈን እና ከክፍያ አሰባሰብ ጋር ተያይዞ ችግሮች/ተግዳሮቶች ካሉ እነዚህ ችግሮች ምንድን ናቸው?
- 14. ወጪዎች ሙሉ በሙሉ መሸፈናቸውን ለጣረጋገጥ በተለየ መንገድ ምን ሊደረባ ይችላል?

#### አስተ*ያየቶች/ሃሳቦች*

- 15. ጽ/ት ቤትዎ እነዚህን የውሃ ጣቢያዎች በመደገፍ ረገድ ውጤታማ ነበር?
- 16. እነዚህን የውሃ ጣቢያዎችን በመደገፍ ረገድ የሚያጋጥጧችሁ ተባዳሮቶች/ችባሮች ምንድን ናቸው?
- 17. ከእኔ ጋር መወያየት የሚፈልጉት ሌላ ማንኛውም ነገር አለ?

#### ስለ "ብክለት" ናምና

ቃሰምጠይቅ አድራጊ፣ ሲነጋንሩባቸው የሚፈልጓቸውን በሚሲኒየም ወተር አሲያንስ ኢትዮጵያ (MWA-EP) የተንነቡ የውሃ ጣቢያዎች ዝርዝር ተያያዥነት ካሳቸው የቀበሌዎች እና የመንደሮች ዝርዝር ጋር ለተጠያቂው ያሳዩዋቸው፡፡ ስለእያንዳንዳቸው የተቻለውን ያህል መረጃ ይጠይቁ ፡፡

#### **ለማስ,ታወሻ ,ያዥ:** ሁሉንም መልሶች ይመዝግቡ::

١.	በአጠቃላይ ይህን የቀበ በሚተገበሩ አዲስ ፕሮ			ስቱ በእነዚህ አካባቢዎች ከ2001 የ እያንዳንዱን ያብራሩ:	በኋላ የውሃ አቅርበት	· ለማዳረስ
			ንደር: ተባር	ለሪ/ፈፃሚ (ለ <i>ጋ</i> ሽ ድርጅት)፡		-
	ለ. ቀበሌ: ተሰራው ስራ ዓይነት: _	_	መንደር:	ተግባሪ/ፈፃሚ (ለጋሽ ድርጅት	):	

		ተግባሪ/ፈፃሚ (ለጋሽ ድርጅት):
ተበራው በራ ኅይነተ:		
<i>መ.</i> ቀበሌ: <i>ጎ</i> ፕ:	መንደር:	ተባባሪ/ፈፃሚ (ለጋሽ ድርጅት):
		and the second of the second
		ተባባሪ/ፌፃሚ (ለጋሽ ድርጅት):
ፕแራው		
ረ. ቀበሌ:	<b>ጎ</b> ፕ: መ'	ያደር: ተባባሪ/ፈፃሚ (ለ <i>ጋ</i> ሽ ድርጅት):
ጣቢያዎች መልሶ ለማቋቋም	የተደረገ ጣንኛውም ዓይ	ወተር አሊያንስ ኢትዮጵያ (MWA-EP) የውሃ አቅርቦት ስራዎች ሪነት ፕረት መኖሩን ያውቃሉ? የውሃ ጣቢያ ስም:
ቀበሌ:		(w) (III)
ጎጥ:		
መንደር:		
l. የመልስ ማቋቋሙን ያ	ደረገው ማነው?	አሳውቅም
2.	አሳውቀ <sup>ያ፣</sup>	
		የውሃ ጣቢያ ስም:
ቀበሌ:		1ω τ πι <sub>σ</sub> , πτ.
ጎጥ:		
መንደር:		
4. መልስ ማቋቋሙን ያያ		አላውቅም
5.		
6. ምን አደረጉ!		
መለስ ማቀቀመ የሐየ / ኅለት	የሙሃ አቅርበት አኅለባለ	eት ስርዓት/የውሃ ጣቢያ ስም:
ቀበሌ:		
ጎጥ:		
መንደር:		
7. መልስ ማቋቋሙን ያያ		አላውቅም
8. ##?		
9. ምን አደረጉ?		
መልስ ማቋቋም የተደረገለት	የውሃ አቅርበት ስርዓሰ/	የውሃ ጣቢያ ስም:
ቀበሌ:		
ቀበሌ: ንጥ:		
ንተ: መንደር:		
ንጥ: መንደር: 10. መልስ ማቋቋሙን ያያ	 የረገው ማነው?	አላውቅም
ንተ: መንደር:	 ረረገው ጣነው? አላውቅም	

ዋበበ				
ጎጥ:				
መን	<b>२८:</b>	_		
13.	መልስ ማቋቋሙን ያደረገው	ማነው?	አላውቅም	
14.	መቼ? አላውሳ	5gp		
15.	ምን አደረጉ?			

# d. Key Informant Interview with Woreda/Kebele Health Office (Amharic)

ከወረዳ ወይም ከቀበሌ ጤና ጽ/ት ቤት ዋና መረጃ ሰጪ ጋር የሚደረግ ቃለመጠይቅ

የቃለ	OD (	ከይቅ	በታ

ስም (ስሞቸ):	የስራ መደብ (መደበች):	ወ/ሴ
ስም (ስሞች):	የስራ	ወ/ሴ
ስም (ስሞች):	<u>የ</u> ስራ መደብ (መደቦች):	መ/ሴ
<i>ቃ</i> ለመጠይቅ የተደረገበት ቀን:	ቃለመጠይቅ የተደረገበት ሰዓት:	
የቃለመጠይቅ አድራጊ ስም፡	ማስታወሻ የሚይዘው ሰው ስም:	

### ወደ ቃለመጠይቁ ከመባባትዎ በፊት የስምምነት መጠየቂያ መባለጫውን አንብበው ከሁሉም መረጃ ሰጪዎች ስምምነት ማግኘት አለብዎት

- 1. የጤና ጽ/ቤቱ በዚህ ወረዳ ወይም ቀበሌ ያሉ የውሃ አቅርቦትን ለማዳረስ የተነደፉ እና የሚተገበሩ ስራዎችን በመደገፍ ረገድ ምን ሚናዎችን ይጫወታል? [ ነፃ ምሳሽ]
  - **የማውጣጫ ዋያቄ** ይህ ቢሮ ውሃ መኖሩንና ዋራቱን ለመቆጣጠር ምን ዓይነት ኃላፊነት እንዳለበት ያውጣጡ?
- 2. የውሃ አቅርቦትን ለማዳረስ የተነደፉ እና የሚተገበሩ ስርዓቶች/የውሃ ጣቢያዎችን ከሚያስተዳድሩ የውሃ ፤ የአካባቢ እና የባል ንፅህና ከሚቴዎች ጋር ግንኙነት ታደርጋላችሁ? በምን ዓይነት መንገዶች?
- **3**. እባክዎ የትኞቹ የውሃ ጣቢያዎች እንደተመረመሩ ይባለፁ፡፡ በምርመራዎቹ ምን እንደተለካ ጨምረው ያብራሩ፡፡ *[ ነፃ ምላሽ*]
- **4.** በእያንዳንዱ የውሃ ጣቢያ የውሃ ጥራት በየስንት ጊዜው ይለካል?
  - ቢያንስ በዓመት 12 ጊዜ
  - ከ12 ጊዜ ያነሰ ሆኖ በዓመት ቢያንስ 4 ጊዜ ይለካል
  - ከ4 ጊዜ ያነሰ ሆኖ በዓመት ቢያንስ | ጊዜ ይለካል
  - በዓመት አንድ ጊዜ
  - በዓመት ከ1 ጊዜ ያነሰ
  - ፕሬቱ አይመረመርም
- 5. የጥራት ምርመራው ውጤት የውሃ ምንጩ በብሔራዊ ደረጃ ከተቀመጠው የባዮሎጇካል እና ኬሚካል በሽታ አምጪ ተዋስያን የልኬት ደረጃ በላይ ከሆነ ምን ይደረ*ጋ*ል? *[ነፃ ምሳሽ*]
  - **የማውጣጫ ጥያቄ**: ችግሩን የመፍታት ኃላፊነት ያለበት ማን እንደሆነ ያውጣጡ?
  - **የማውባጫ ዋያቄ:** ችግሩ ምን ያህል በተደ*ጋጋሚ እን*ደተፈታና በምን ያህል ፍጥነት *እን*ደተፈታ ያውጣጡ?
- **6.** ይህ ጽ/ቤት የውሃ አቅርቦትን ለማዳረስ የተነደፉ እና የሚተገበሩ አሰራሮች ድጋፍ በሚሰጥበት ወቅት የሚያጋጥሙት ችግሮች/ተግዳሮቶች ምንድን ናቸው? [*ነፃ ምላሽ*]
- 7. ጽ/ት ቤትዎ በዚህ አካባቢ የውሃ ፤ የአካባቢ እና የግል ንፅህና ልጣናዶች እንዲዳብሩ ለጣስተዋወቅ እና ለጣንልበት የሚጫወታቸው ሌሎች ሚናዎች ካሉ ምንድን ናቸው? [*ነፃ ምላሽ*]

*ሲቃለመጢይቅ ኢድራጊ፣ ሲነጋገሩባቸው የሚፈልጓቸውን እያጓዳንዱን የሚሊኒየም ወተር አሊየንስ ኢትዮጵያ* (MWA-EP) የውሃ አቅርቦት

ስርዓት *እና የውሃ ጣቢያ ይለዩ። ለእያንዳንዱ የውሃ ጣቢያ ከ*200*\ ጀምሮ ተመዝባቦ የተያዘ የውሃ ዋራት ምርመራ ካለ ይጠይ***ቱ።** 

የውሃ ልኬቶች መብለጥ የሌለባቸው: የፌካል ኩሊፎረም ይዘት፣ ፌካል በሽታ አምጪ ባክቴሪያ ወይም ኢኮላይ፡ በየ100ሊትር ከ0 ያልበለጠ የአርሰኒክ ይዘት: በአንድ ሊትር ከ0.01 ሚሊ ግራም ያልበለጠ የፍሎራይድ ይዘት: በሊትር ከ0.5ሚሊ ግራም ያልበለጠ

				ተንነባ የውሃ ጣቢያ ስም! በታ <b>:</b>
				<b>የጠይቅ አድራጊ</b> : ከብሔራዊ የልኬት ደረጃ የሚበል <i>ጥ ማንኛውም የ</i>
Y.	90,000	ራ ውጤተ ባለ	መዝግበው ይያዙ (ሳዮኑን ይመል	(17):
	1.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤት:
	2.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤት:
	3.	ዓመት/ወር: _	_ የተመረመረው ነገር:	የምርመራው ውጤት:
	4.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤት:
	5.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤት:
	6.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤት:
				የምርመራው ውጤት:
	8.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤት:
	9.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤት:
). A	7 2 14 a	ጕ <i>ሕን</i> ደተደረገ ,	୧ <i>ግስፁ (ስምሳሌ በየወሩ፣ በየዓመ</i>	ተንነባ የውሃ ጣቢያ ስም ቦታ፣
). <i>n</i>	† 214.0 1 <b>21.1</b> 21	ዮ ሕንደተደረገ , <b>የም ወተር አሲ</b> ራት ምርመራዕ	୧ <i>ግስፁ (ስምሳሌ በየወሩ፣ በየዓመ</i>	ተ) ተንነባ የውሃ ጣቢያ ስም ቦታ: የ <b>ጣይቅ አድራጊ:</b> ከብሔራዊ የልኬት ደረጃ የሚበል <i>ጉ ማንኛውም</i> የ
). A	7 2,16.0 7 20.2 7 20-4 17	ዮ ሕንደተደረገ , <b>የም ወተር አሲ</b> ራት ምርመራዕ ራ ውጤት ካለ	e	ተንነባ የውሃ ጣቢያ ስም ቦታ፡ የጣይቅ አድራጊ፡ ከብሔራዊ የልኬት ደረጃ የሚበል <i>ተ ማንኛውም የ</i> ከቱ):
). A	7 2,H.A. 1 2,H.A. 2 2,H.A. 2 2,H.A. 2 2,H.A. 2 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	<b>የም ወተር አለ.</b> ራት ምርመራወ ራ ውጤት ካለ ዓመት/ወር: _	<i>୧ግ</i> ስፁ (ለምሳሌ በየወሩ፣ በየዓመ <b>የንስ ኢትዮጵያ (MWA-EP)</b> የ ው ተመዝግቦ የተያዘ ከሆ <b>ነ ቃሰ</b> መ መዝግበው ይያዙ (ሳፕኑን ይመል! የተመረመረው ነገር:	ተነ <b>ሳ የውሃ ጣቢያ ስም ቦታ:</b> <b>የብይቅ አድራጊ:</b> ከብሔራዊ የልኬት ደረጃ የሚበል <i>ጥ ማንኛውም የ</i> ከቱ): የምርመራው ውጤት:
). A	7. 2,16.00 7. 2,16.00	<b>የም ወተር አሲ.</b> የ <b>ም ወተር አሲ.</b> ራት ምርመራ ራ ውጤት ካለ ዓመት/ወር: _ ዓመት/ወር: _	<i>୧ግስፁ (ሰምሳሌ በየወሩ፣ በየዓመ</i> <b>የንስ ኢትዮጵያ (MWA-EP) <i>የ</i></b> ው ተመዝባበ የተያዘ ከሆኔ <b>ቃሰ</b> መዝባበው ይያዙ (ሳጥኦን ይመል የተመረመረው ነገር: የተመረመረው ነገር:	ተ <i>ነነባ የውሃ ጣቢያ ስም!ቦታ</i> ፡ የ <b>ጣይቅ አድራጊ</b> ፡ <i>ከብሔራዊ የልኬት ደረጃ የሚበልተ ማንኛውም የ</i> የታ): የምርመራው ውጤት: የምርመራው ውጤት:
). A	7 2,H. a. 2,H.	<b>የም ወተር አለ.</b> ራት ምርመራወ ራ ውጤት ካለ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _	<i>የግስፁ (ስምሳሌ በየወሩ፣ በየዓመ</i> <b>የንስ ኢትዮጵያ (MWA-EP)</b> <i>የ</i> ም ተመዝባቦ የተያዘ ከሆን <b>ቃለመ</b> መዝባበው ይያዙ (ሳፕኑን ይመል  የተመረመረው ነገር:  የተመረመረው ነገር:  የተመረመረው ነገር:	ተ <i>ነነባ የውሃ ጣቢያ ስምበታ</i> ፡ ተ <i>ነነባ የውሃ ጣቢያ ስምበታ</i> ፡ ስታ): የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት:
). A	7. 2,H.A. 20-4 T. 20-4 T. 2. 3. 4.	<b>የም ወተር አሲ</b> ራት ምርመራወ ራ ውጤት ካስ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _	<i>୧ግስፁ (ስምሳሌ በየወሩ፣ በየዓመ</i> <b>የንስ ኢትዮጵያ (MWA-EP) የ</b> ው ተመዝግቦ የተያዘ ከሆኔ <b>ቃሳ</b> መዝግበው ይያዙ (ሳጥኑን ይመል የተመረመረው ነገር: የተመረመረው ነገር: የተመረመረው ነገር: የተመረመረው ነገር: የተመረመረው ነገር:	ተነ <b>ሳ የውሃ ጣቢያ ስምሀቦታ: ግግዶቅ አድራጊ:</b> ከብሔራዊ የልኬት ደረጃ የሚበል <i>ፕ ማንኛውም የ</i> የተ):
). A	7. 2,H.A. 2. 2. 3. 4. 5.	<b>የም ወተር አለ. የም ወተር አለ.</b> ራት ምርመራወ ራ ውጤት ካለ  ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _	<i>የግስፁ (ስምሳሌ በየወሩ፣ በየዓመ</i> <b>የንስ ኢትዮጵያ (MWA-EP)</b> የ መዝግበው ይያዙ (ሳ <i>ተኑን ይመ</i> ል የተመረመረው ነገር: የተመረመረው ነገር: የተመረመረው ነገር: የተመረመረው ነገር: የተመረመረው ነገር: የተመረመረው ነገር:	ተ <i>ነነባ የውሃ ጣቢያ ስምቦታ</i> ፡ የ <b>ጣይቅ አድራጊ</b> ፡ <i>ከብሔራዊ የልኬት ደረጃ የሚበልዋ ማንኛውም የ</i> ከ <i>ቱ</i> ): የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት:
). A	7. 2,H.A. 2. 2. 3. 4. 5.	የም ውተር አለ.  የም ውተር አለ.  ራት ምርምራሳ  ሩ ውጤት ካለ !  ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _	<i>የግስፁ (ስምሳሌ በየወሩ፣ በየዓመ</i> <b>የንስ ኢትዮጵያ (MWA-EP)</b> የ ው ተመዝባቦ የተያዘ ከሆኔ <b>ቃለ</b> መ መዝባበው ይያዙ (ሳጕኑን ይመል _ የተመረመረው ነገር: _ የተመረመረው ነገር: _ የተመረመረው ነገር: _ የተመረመረው ነገር: _ የተመረመረው ነገር: _ የተመረመረው ነገር: _ የተመረመረው ነገር:	ተንነባ የውሃ ጣቢያ ስምሀንተ: የጠይቅ አደራጊ፡ ከብሔራዊ የልቤት ደረጃ የሚበልጥ ማንኛውም የ የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት:
). <i>n</i>	1. 2. 3. 4. 5. 6. 7.	የም ውተር አለ የም ውተር አለ የም ውተር አለ የሙት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _ ዓመት/ወር: _	e	ተ <i>ነነባ የውሃ ጣቢያ ስምቦታ</i> ፡ የ <b>ጣይቅ አድራጊ</b> ፡ <i>ከብሔራዊ የልኬት ደረጃ የሚበልዋ ማንኛውም የ</i> ከ <i>ቱ</i> ): የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት: የምርመራው ውጤት:

11.	በሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) <i>የተ</i> ንነባ የውሃ ጣቢያ ስም!ቦታ <del>:</del>
	የውሃ

1.	ዓመት/ወር:የተመረመረው ነገር:	_የምርመራው ውጤት:
2.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:
3.	ዓመት/ወር:የተመረመረው ነገር:	_የምርመራው ውጤት:
4.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:
5.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:
6.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:
7.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:
8.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:
9.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:
ቃስመጠይቅ	<b>የ አድራጊ</b> ከተ <i>ቻለ ፎቶግራፍ ያንሱ፡፡ የየትኞቹ ዓመታት የ</i>	የውሃ
በየስ <i>ንት ጊዜ</i>	ት ሕንዴተደረገ ይግለፁ (ለምሳሌ በየወሩ፣ በየዓመቱ)	

a Or  $\Omega$ 

## 12. በሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) የተንነቡባየውሃ ጣቢያ ስምበታ:

የውሃ ዋራት ምርመራው ተመዝባቦ የተያዘ ከሆነ **ቃለመጠይቅ አድራጊ**፡ ከብሔራዊ የልኬት ደረጃ የሚበል*ጥ ማንኛውም አይነት* የምርመራ ውጤት ካለ መዝግበው ይያዙ (ሳፕኑን ይመልከቱ):

١.	ዓመት/ወር:	_የተመረመረው ነገር:		_የምርመራው ውጤት:	
		_የተመረመረው ነገር:		_የምርመራው ውጤት: _	
		_የተመረመረው ነገር:	<del></del>	_የምርመራው ውጤት: _	
		_የተመረመረው ነገር:	_	_የምርመራው ውጤት: _	
5.	ዓመት/ወር:	_የተመረመረው ነገር:	_	_የምርመራው ውጤት: _	
		_ የተመረመረው ነገር:	_	የምርመራው ውጤት:	
		_ _የተመረመረው ነገር:	_	- የምርመራው ውጤት:	
		_ _የተመረመረው ነገር:	_	- የምርመራው ውጤት:	
		_ _የተመረመረው ነገር:	_	- የምርመራው ውጤት:	

በየስንት ጊዜው ሕንዴተደረገ ይግለፁ (ለምሳሌ በየወሩ፣ በየዓመቱ)

USAID.GOV

# 13. በሚሊ*ኒየም ወተር አሊየንስ ኢትዮጵያ (*MWA-E**P**) የተንነቡ የውሃ ጣቢያ ስምበታ:

	ዓመት/ወር:የተመረመረው ነገር:	A	
_		የምርመራው ውጤት:	
3.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:	
4.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:	
5.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:	
6.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:	
7.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:	
8.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:	
9.	ዓመት/ወር:የተመረመረው ነገር:	የምርመራው ውጤት:	

## e. Key Informant Interview – MWA-EP Implementer (Amharic) የሚሊኒየም ወተር አሊያንስ አጋር ተግባሪ አካላት ዋና መረጃ ሰጪ ጋር የሚደረግ ቃለመጠይቅ

የሚሊኒየም	ወተር	አሊ <i>ያ</i> ንስ	ኢጋር	ተግባሪ	የቃለ <i>መ</i> ጠይቅ ቀን:
አካላት፡					
					የቃለመጠይቅ ሰዓት፡
ወረዳ:					
101					የቃለመጠይቅ አድራጊ ስም:
ዋበሌ:					የማስታወሻ ያዥ ስም:
<b>ሳ</b> ጥ:					
ስም:			ሰልክ	ቁጥር:	ወ/ሴ
ስም:			ሰልክ	ቁጥር:	
ስም:			ሰልክ	ቁጥር:	መ/ሴ

### ወደ ቃለመጠይቁ ከመባባትዎ በፊት የስምምነት መጠየቂያ መባለጫውን አንብበው ከሁሉም መረጃ ሰጪዎች ስምምነት ማግኘት አለብዎት

- 1. ከ1996 እስከ 2001 ዓ.ም. ድረስ በተተገበረው የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ፕሮግራም ውስጥ የነበርዎት ተሳትፎ ምን ዓይነት ነበር?
  - ሀ. በአሁን ወቅት ከሚሊኒየም ወተር አሊያንስ (MWA) ፕሮጅክት *ጋ*ር ባንኙነት ካሎት ባንኙነትዎ ምንድን ነው?
- 2. ድርጅትዎ ለሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ምን ዓይነት የውሃ ፣ የአካባቢ እና የግል ንፅህና ሥራዎች ሰርቶ አጠናቋል?
- 3. ድርጅትዎ የውሃ አቅርበት የማዳረስ ስራዎችን የሚተገበርበትን ማህበረሰብ እና የአተገባበሩን አካሄድ ለመምረጥ ምን ዓይነት ዘዴ ተጠቀመ! እነዚህን ሁለት ጉዳዮች በመምረጥ ሂደት ውስጥ ማን ተሳተፈ!
- 4. በእርስዎ እይታ ፕሮጀክቱ በተጠናቀቀበት ወቅት ሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ካከናወናቸው ተግባራት መካከል የውሃ ፤ የአካባቢ እና የግል ንፅህናን ተግባራዊ በማድረግ የሚገኙ ውጤቶችን ይበልጥ ስኬታጣ እንዲሆኑ ያደረጉት የትኞቹ ተግባራት ናቸው? ለምን?
  - ህ. **የማውጣጫ ጥያቄ** እነዚህን ተግባራት ስኬታማ ያደረጋቸው ምን ይመስልዎታል?
  - ለ. *የማውጣጫ ዋያቄ* በምሳሌነት ሊጠቅሷቸው የሚችሉ በጣም ስኬታጣ የሆኑ ጣህበረሰቦች አሉ? እባክዎ ይግለፁ፡፡
- 5. የውሃ ፣ የአካባቢ እና የግል ንፅህና ስራዎችን ወይም ከነዚህ ስራዎች የሚ*ገኙ*ት ጥቅሞችን የተሸለ የረዥም ጊዜ ዘላቂነት እንዲኖራቸው በትግበራ ወቅት የተወሰዱ እርምጃዎች ካሉ ምንድን ናቸው? እባክዎ ይግለው፡፡
  - ሀ. ውጤቶቹ ዘላቂነት እንዲኖራቸው ይበልጥ ያስቻለው ምንድን ነው?
  - ለ. ዋና ዋና የሚባሉት ተግዳሮቶች ምንድን ነበሩ?
- 6. ካለዎት ልምድ በመነሳት በኢትዮጵያ ውስጥ የረጅም ጊዜ ዘላቂነት ያላቸው የውሃ ፤ የአካባቢ እና የግል ንፅህና መሰረተ ልጣቶችን ለማሳካት ከሚያጋጥሙ እንቅፋቶች/ተግዳሮቶች ውስጥ አንዳንዶቹ ምንድን ናቸው?
  - ህ. **የማውጣሜ ጥያቄ** የውሃ ፣ አካባቢ እና የግል ንፅህና ፕሮጀክት ትግበራ ከተጠናቀቀ በኋላ ከአንድ ፣ ሁለት ወይም ስምንት ዓመታት በኃላ መለስ ብለው ሲመለከቱ ነገሮች እንኤት ይቀያራሉ?

- ለ. **የማውጣጫ ጥያቄ:** ተጠያቂው ምላሽ በሚሰጡበት ወቅት ስለተንነቡ የውሃ መሰረተ ልጣቶች እና በማህበረሰቡ ላይ ስለመጣው የባህሪ ለውጥ ዘላቂነት ጉዳይ እንዲዳስሱ በጥያቄ ያውጣጡ
- 7. ሰዎች ያዳበሩቱን/ ያመጡትን ጥሩ የሆነ የግል ንፅህና የመጠበቅ ባህሪን ዘላቂ እንዲሆን ስለማድረግስ? ይህንን ሰዎች ያመጡትን የባህሪ ለውጥ ለረዥ ጊዜ ዘላቂ እንዲሆን ለማድረግ እንቅፋት የሚሆኑ ነገሮች/ተግዳሮቶች ምንድን ናቸው?
  - ሀ. የውሃ ፣ አካባቢ እና የግል ንፅሀና ፕሮጀክት ትግበራ ከተጠናቀቀ በኋላ ከአንድ ፣ ሁለት ወይም ሶስት ዓመታት በኃላ መለስ ብለው ሲመለከቱ ነገሮች እንዴት ይቀያራሉ?
- - ሀ. *የስትትል ጥያቄ* ፕሮጀክቱ ከተጠናቀቀ ከ8 ዓመት ወዲህ በእነዚህ መንደሮች ውስጥ ከውሃ ፣ የአካባቢ እና የግል ንፅህና እንዲሁም ከሌሎች ለውጦች *ጋ*ር በተያያዘ በተጨባጭ እተፈጠረ ያለ የሚያውቁት ነገር አለ? ካለስ ምንድን ነው?
- 9. በእነዚሁ ተመሳሳይ ቀበሌዎች/መንደሮች ውስጥ ባለፉት ሶስት ዓመታት በሌሎች ለጋሽ ድርጅቶች የተከናወኑ አዳዲስ ፕሮግራሞች እንዳሉ ማንዛቤው አለዎት?
- 10. ድርጅትዎ ከሚሲኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ፕሮጀክት ልምድ በመውሰድ በአሁኑ ወቅት የተሻለ የረዥም ጊዜ ዘላቂነትን ለማምጣት በተለየ መልኩ የሚያደርገው ነገር አለ? ካለ እባክዎን ለውጦቹን አብራርተው ይባለጹ? ለምን?
- 11. ስለ ሚሊኒየም ወተር አሊያንስ ኢትዮጵያ (MWA-EP) ወይም በአጠቃላይ በነዚህ ጉዳዮች ዙሪያ ሊያካፍሉን የሚፈልጉት ሴላ ሃሳብ አለ?

# f. Key Informant Interview on Household and Shared Community Latrine Use (Amharic)

ለቤተሰብ በአባውራ ደረጃ የትንነቡ መፀዳጃ ቤቶች እና የማህረሰብ የ*ጋራ መ*ጠቀሚ*ያ መፀ*ዳጃ ቤቶች አጠቃቀም በተመለከተ ከዋና መረጃ ሰጪ *ጋ*ር የሚደረግ ቃለመጠይቅ

የሚሊኒየም ወተር አሊያንስ ተግባሪ ኢጋር አካላት:	የቃለመጠይቅ ቀን:	
	የቃለመጠይቅ ሰዓት:	
ወረዳ:	የቃለመጠይቅ አድራጊ ስም:	
ቀበሴ:		
<i>ጎ</i> ጥ:	የማስታወሻ ያዥ ስም: _	
<b>ምላሽ ሰጪ  :</b> ስም:	ፆታ: ዕድሜ:	
· · · · · · · · · · · · · · · · · · ·	<u>ት የስምምነት መጠየቂያ መግለጫውን አንብበው ከሁሉም</u> ዎች ስምምነት ጣግኘት አለብዎት	
<b>ለቃለመጠይቁ ለዋና መረጃ ሰጪነት የተመረጡበት ምክ</b> ን <b>ሀ.</b> በመፀዳጃ ቤት ሲጠቀሙ ስለታዩ <b>ለ.</b> በመፀዳጃ ቤት አቅራቢያ በመኖራቸው <b>ሐ.</b> የመፀዳጃ ቤቱ ባለቤት ስለሆኑ (ለቤተሰብ		
የመፀዳጃ ቤቶች ገፅታዎች/ሁኔታ		
	አላውቅም በኋላ ከዚህ ድርጅት ውጪ የሆነ ማንኛውም ሌላ ዓይነት የውሃ አቅርቦት የ ከማህበረሰቡ አባላት <i>ጋ</i> ር ለመስራ የመጣ ድርጅት አለ? ከሆነ ይህ መቼ	
የመፀዳጃ ቤት ተጠቃሚዎች ሁኔታ		
በተዴጋጋሚ ይጠቀሙበታል?	ከሌላ ቦታ (ለምሳሌ ሜዳ ላይ) ከሚጠቀሙት ጋር ሲያነፃፅሩት ምን ያህል	

6. በዚህ መፀዳጃ ቤት/ቤቶች ምን ያህል ደስተኛ ነዎት? ለምን?

ለምን?

- ሀ. **የማውጣጫ ጥያቄ።** ከአስተማማኝነቱ *ጋ*ር በተያያዘ ደስተኛ *መ*ሆናቸውን ያውጣጡ
- ለ. *የማውጣጫ ጥያቄ፡* ከአልባሎት ጥራት *ጋ*ር በተያያዘ ደስተኛ መሆናቸውን ያውጣጡ
- ህ. **የማውጣጫ ጥያቄ፣** ከሚቀርበው የውሃ መጠን ጋር በተየያዘ ደስተኛ መሆናቸውን ያውጣጡ
- መ. **የማውጣሜ ጥያቄ፣** ከንፅህና እና ከምቾት *ጋ*ር በተያያዘ ደስተኛ መሆናቸውን ያውጣጡ

7. ይህ እነዚህ መፀዳጃ ቤት ከተገነባ ወይም እነዚህ መፀዳጃ ቤቶች ከተገነቡ ወዲህ ሌሎች ሰዎች የራሳቸው መፀዳጃ ቤቶች ገንብተዋል? በእርስዎ እይታ ለምን ገነቡ ወይም አልገነቡም?

#### እጅ *መ*ታጠብ

- 8. የእጅ መታጠቢያው በታው የተሰራው መፀዳጃ ቤቱ በተገነባበት ወቅት ነው?
- 9. ሰዎች መፀዳጃ ቤቱን ከተጠቀሙ በኋላ እጃቸውን በሳሙና/በአመድ እና ውሃ እንደሚታጠቡ ምንያህል በተደ*ጋጋ*ሚ አስተውለዋል?
- 10. መፀዳጃ ቤቱ በተንነባበት ወቅት ድርጅቱ እጅ የመታጠብ ልማድን ከማዳበር *ጋ*ር ተያይዞ የሰጠው ትምህርት ወይም ስልጠና አለን
- 11. በእርስዎ እይታ ሰዎች መፀዳጃ ቤት ከተጠቀሙ በኋላ ሁልጊዜ እጃቸውን ላይታጠቡ የሚቸሉበት ምክንያት ምንድን ነው?

#### በማፀዳጃ ቤቱን ባለበት ሁኔታ ጠብቆ ማቆየት ፣ ፅዳት እና ጥገና

- 12. ይህን መፀዳጃ ቤት ወይም መፀዳጃ ቤቶች ለጣፅዳት፣ ባለበት ሁኔታ ጠብቆ ለጣቆየት እና ለመጠንን ኃላፊነት የተሰጠው ጣነው?
- ህ. **የማወጣሜ ጥያቄ፡** ምንአልባት እነዚህን ሶስት ስራዎች እንዲያከናውኑ ኃላፊነት የተሰጣቸው የተለያዩ ሰዎች ሊኖሩ ስለሚችሉ ስለእያንዳንዱ በማውጣጣት ይጠይቁ
- 13. ለመፀዳጃ ቤቶቹ በመደበኛነት ምን ያህል ፅዳት እና ጥቢቃ ይደረግላቸዋል? ከዚህ ጋር ተያይዞ ተፈጥረው የሚያውቁ ማንኛውም ዓይነት ችግሮች አሉ? ካሉ ምንድን ናቸው?
- 14. መፀዳጃ ቤቱን ወይም መፀዳጃ ቤቶቹን ለጣፅዳት፤ ጠብቆ ለጣቆየት እና ለጥንና የሚያስፈልጉ ወጪዎችን የሚከፍለው ጣነው?
- 15. መፀዳጃ ቤቶች ሁል ጊዜ ንፅህናቸው የተጠበቀና ለተጠቃሚዎች በአግባቡ አገልግሎት እንዲሰጡ ለጣድረግ እንዳይቻል የሚያደርጉ እንቅፋቶች/ ተግዳሮቶች ምንድን ናቸው? አንድ ድርጅት ይህን ችግር ለጣቃለል ጣድረግ የሚችል ጣንኛውም ነገር አለ?

#### ለጋራ መጠቀሚያ መፀዳጃ ቤቶች ብቻ: ክፍያዎች

- 16. በእነዚህ መፀዳጃ ቤቶች ላይ የጥገና ስራዎችን ለማከናወን የሚያስችል ገንዘብ የሚገኘው ከየት ነው? 17. እባክዎን ሰዎች ይህን መፀዳጃ ቤት ለመጠቀም የሚከፍሏቸውን ክፍያዎች ሁሉ ይዘርዝሩ
- ሀ. ዓመታዊ ክፍያ: \_\_\_\_ ለ. በተጠቀሙ ቁጥር የሚከፍሉት ክፍያ: \_\_\_\_ ሐ. ሴላ ክፍያ (ያብራሩ):
- 18. ክፍያዎችን የመሰብሰብ ኃላፊነት ያለበት ማነው?
- 19. እነዚህ ክፍያዎች የሚሰበሰቡት እንዴት ነው?
- 20. የተጣለባቸውን ክፍያ ጥራሽ የማይከፍሉ ወይም በተገቢው ጊዜ የማይከፍሉ ተጠቃሚዎች አሉ?
  - ህ. **የማውጣጫ ጥያቄ፡** እነዚህ ሰዎች ማን ናቸው?
  - ለ. *የማውጣጫ ጥያቄ*። የጣይከፍሉት ለምንድን ነው?
- 21. ይህን መፀዳጃ ቤት ለማስተዳደር የሚሆን ገንዘብ የሚገኝባቸው ሌሎች ማንኛውም ዓይነት ምንጮች አሉ? ህ. አዎ ከሆነ፡ ያብራሩ

# g. Group Interview with Shared Community Latrine Management (Amharic) የማህበረሰብ የ*ጋራ መጠቀሚያ የሆኑ መፀዳጃ* ቤቶች አስተዳዳሪዎች *ጋር የሚደረግ* የቡድን ቃለመጠይቅ

ሚሊኒየም ወተ	·ር አሊያንስ ኢትዮጵያ አ <i>ጋ</i> ር ተግባሪ አካላት:	መንደር: _	
		የቡድን ቃ	ለመጠይቅ የተደረገበት
ወረዳ:		ቀን ፡	
ቀበሌ:		የ,ቃለመጠ,	ይቅ አድራጊ ስም:
			የማስታወሻ ያዥ ስም:
ምለሽ ሸጪ I:	ስም:በማስተዳደር ስራው ውስጥ ያለው '	<b>ግ</b> ና:	ወ/ሴ <i>ዕድሜ</i> :
ምለሽ ሸጪ 2:	ስም:በማስተዳደር ስራው ውስጥ ያለው ሳ	<b>ሚና:</b>	ወ/ሴ ዕድሜ:
ምለሽ ሸጪ 3:	ስም:በማስተዳደር ስራው ውስጥ ያለው ሳ	<b>ግ</b> ና:	ወ/ሴ ዕድሜ:
	ወደ ቃለመጠይቁ ከመግባትዎ በፊት የስምምነት ወ	<sup>ም</sup> ጠየ <i>ቂያ መ</i>	<i>ባ</i> ለጫውን አንብበው ከሁሉም
	<i>ማረጃ</i> ሰጪዎች ስምምነት		
የመፀዳጃ ቤቱ	ሁኔታ		
	ይህ መፀዳጃ ቤት መቼ ተገነባ ወይም እነዚህ መፀዳጃ ቤ	ቶች <i>መቼ</i> ተ	<i>ባ</i> ነቡ? አላው <i>ቅ</i> ም
	በማን ተንነባ? አላውቅም		
3.	ድርጅቱ ይህንን የመፀዳጃ ቤት ግንባታ ካከናወነ በኋላ ከ የፅዳት ስራዎች ከእርስዎ ወይም የማህበረሰቡ አባላት <i>ጋ</i> ር ድርጅቱስ ምን አደረገ?	, ,	
4	በዚህ ማህበረሰብ ውስጥ አብዛኛው ሰው በቤተሰብ ደረ <i>ነ</i>	ቻ <i>መ</i> ልዴ'ኛ በ	ት አለሙ?
	የዚህ የ <i>ጋራ መፅዳጃ</i> ቤት ተጠቃሚዎች በመፅዳጃ ቤቶቱ		
የተጠቃሚዎች	ሁኔታ		
6.	እነዚህን መፀዳጃ ቤቶች የሚጠቀምባቸው ማነው? ለምን ነው የማይጠቀሙባቸው?	? የማይጠቀ	ምባቸው ሰው ወይም ቡድኖች አሉ? ካሉ ለምንድን
7.	በእያንዳንዱ ቀን በባምት ስንት ሰው መፀዳጃ ቤቶቹን ይ	ጠቀማል?	

#### እጅን *መ*ታጠብ

- 8. ለመፀዳጃ ቤት ተጠቃሚዎች የሚሆን የእጅ መታጠቢያ ቦታ አለ? ከሌለ መፀዳጃ ቤቶቹ በተገነቡበት ወቅት የእጅ መታጠቢያ ነበር? ከነበረ ምን ደረሰበት/ምን ሆነ?
- 9. ሰዎች መፀዳጃ ቤት ከተጠቀሙ በኋላ እጃቸውን በሳሙና ወይም በአመድ እና ውሃ ሲታጠቡ ምንያህል በተደ*ጋጋሚ* አይተዋል/አስተውለዋል?
  - ሀ. **የማውጣጫ ተያቄ፡** ሁልጊዜ ሰዎች መፀዳጃ ቤት ተጠቅመው ሲወጡ እጃቸውን የጣይታጠቡባቸው ምክንያቶች ናቸው ብለው የሚስቡዋቸው ነገሮች ምንድን ናቸው?

### ጥንና ፣ ባለበት ጠብቶ ስለማቆየት እና ፅዓት

- 10. መፀዳጃ ቤቶቹን ባሉበት ሁኔታ ጠብቆ ማቆየት ተገናዎች የሚከናወኑት እንኤት ነው?
- ህ. **የማውጣጫ ጥያቄ:** ኃላፊነቱ የጣን ነው?
- ለ. *የማውጣጫ ጥያቄ፣* በተግባር ላይ የዋሉት የአሰራር ሂደቶች ምንድን ናቸው?

- 11. መፀዳጃ ቤቶችን በማስተዳደር ረገድ በቀዳሚነት ያጋጠሙ ችግሮች ወይም ጉዳዮች ምንድን ናቸው? የውሃ ኮሚቴው እነዚህን ችግሮች እንዴት ፈታቸው?
  - ሀ. **የማውጣሜ ጥያቄ፣** በአብዛኛው የእጅ መታጠቢያዎችን ባሉበት ጠብቆ ከማቆየት እና ከተገና *ጋ*ር የተያያዙ ችግሮችን ለመፍታት ምን ያህል ጊዜ ይፈጃል?
- 12. በውሃ ጽ/ት ቤት በኩል ከመንግስት የሚደረባ ድጋፍ ካለ ምን አይነት ድጋፍ ነው የሚደረገው? ከውሃ ጽ/ት ቤት ጋር አብሮ መስራትን እንዴት ያዩታል ፣ ምን ይመስላል?
  - ህ. **የማውጣሜ ጥያቄ፡** በዚህ የስራ ማንኙነት ውስጥ ስኬታጣ የነበረው ምንድን

ነበር?

- ለ. *የማውጣጫ ጥያቄ፣* በዚህ የስራ ግንኙነት ውስጥ ምን ዓይነት ችግሮች/ተግዳሮቶች ኢጋጠምዎት?
- 13. የእጅ መታጠቢያዎችን ባሉበት ጠብቆ ለማቆየት እና ለጥና እንኤት ይከፈላል?

#### ክፍያዎች

14.	የመፀዳጃ ቤቶች ፅዳት ፣ ጠብቆ ማቆየትና የተገና ስራዎችን ለማገዝ የሚሰበሰቡ ክፍያዎች ካሉ ምንድን ናቸው <b>?</b> [ <i>ነፃ</i>
	ምሳሽ] [አስፈላ2 ከሆነ በሚከፈሉት የክፍያ ዓይነቶች ላይ ለማውጣጣት ይሞክሩ]
	ህ. ዓመታዊ ክፍ <i>ያ</i> :
	ለ. በተጠቀሙ ቁጥር የሚደረባ ክፍያ:
	ሐ. ሌላ አይነት ክፍያ (ያብራሩ):

- 15. የመፀዳቹ ቤቶቹን ለማስተዳደር በወር ምን ያህል ገንዘብ ወጪ ይደረጋል? ይህ በየጊዜው በምን ያህል ይለያያል?
- 16. ተጠቃሚዎች እንዲከፍሉ የሚጠበቅባቸውን ክፍያዎች በተጨባጭ በምን ያህል ደረጃ ይከፈላሉ? ከውሃ አ*ገ*ልግሎት ክፍያ/ እንዲሰበሰብ ከሚጠበቀው ክፍያ ምን ያህሉ ይሰበሰባል (ይህ አሰራር የሚታወቅ ከሆነ) :
  - 17. ከተጠቃሚዎች የሚሰበሰበው ክፍያ በምን ያህል መጠን ወጪዎችን ለመሸፈን ይበቃል?
    - ህ. **የማውጣጫ ጥያቄ** በተሰበሰቡት ክፍያዎችየትኞቹን ወጮዎች

መሸፈን ይቸላሉ?

ለ. **የማውጣጫ ጥያቄ፡** የተሰበሰበው *ገን*ዘብ በቂ ካልነበረ በተሰበሰበው ክፍያ ሊሸፈኑ ያልቻሉት ወጪዎች የችኞቹ ናቸው?

# h. Group Interview with Two to Three WASHCO Members (Amharic)

ከሁለት እስከ ሶስት ከሚሆኑ የውሃ ፣ የአካባቢ ፅዳትና የግል ንፅህና ኮሚቴ አባላት *ጋ*ር የሚደረግ የቡድን ቃለ - *መ*ጠይቅ

ውሃ አቅ	ዮርቦት ስርዓት ስም:
	የም ወተር አሊያንስ ኢትዮጵያ ተባባሪ:
ዋበቤ: _	
መንደር:	
ውሃ አቅ	 ትቦት ስርዓቱን የሚተዳደረው:
ቃለ መ	nይቁን ከሚሰጡት ሰዎች <i>መ</i> ካከል የአንዱ ስልክ ቁጥር፡ (ስም)
ጥ:	
	<b>ጪ l :</b> ስም:እንደ የውሃ፣ ፅዳትና ንፅህና ኮሚቴነት ያላቸው ሚና: /ሴ ሪድሜ:
	<b>ጪ 2:</b> ስም: እንደ የውሃ፣ ፅዳትና ንፅህና ኮሚቴነት ያላቸው ሚና:
	/ሴ ዕድሜ:
	<b>ጪ 3:</b> ስም: እንደ የውሃ፣ ፅዳትና ንፅህና ኮሚቴነት ያላቸው ሚና:
a	/ሴ
	ወደ ቃለመጠይቁ ከመግባትዎ በፊት የስምምነት መጠየቂያ መግለጫውን አንብበው ከሁሉም
	<u>ወ</u> ደ ይመታጠይቁ በመተነበት በፊት ነበታን ነው ጠቂያ መታጠቂያ መተለፈመን ለንብበሙ በውስታ
	S-CA HOBE I HA A LL LILL HILLE I
	በቢያው ገፅታ
1.	ይህ የውሃ አቅርቦት ስርዓት/የውሃ ጣቢያ የተገነባው መቼ ነው? አላውቅም
2.	የውሃ ጣቢያውን የንነባው ማን ነው? አላውቀም
3.	ይህ የውሃ ጣቢያ ከተገነባ በኋላ በከፍተኛ ደረጃ <i>መ</i> ልሶ የማቋቋም/ከፍተኛ እድሳት ተደርጎለት ያውቃል? አዎ / አይ / አላውቅም
4.	መልሶ የማቋቋሙን/ የማደስ ስራው የሰራው ማን ነው? አላውቅም
	ይህ የሆነው መቼ? አላውቅም
6.	ይህ የውሃ አቅርቦት ስርዓት ከተዘረጋ/ከተገነባ በኋላ ከዚህ ድርጅት ውጪ የሆነ የውሃ ጣቢያውን ለማሻሻል ወይም
	ለሚኖሩበት ማህበረሰቡ ሌላ አይነት የውሃ አቅርቦትና የፅዳት ስራዎች ለመሰራት የመጣ ሌላ የውሃ አቅርቦት ስርዓት አለ? ካለ
7	ይህ መቼ ተከናወነ? የተከናወኑት ተግባራትስ ምንድን ነበሩ?
/.	ማህበረሰቡ በዚህ የውሃ ጣቢያ ምን ያህል ደስተኛ ነው ብለው ያስባሉ? [ <i>ነፃ ምሳሽ</i> ]
የተጠቃ	ሚ ሁኔታ
	በዚህ የውሃ ጣቢያ ምን ያህል አባውራዎች ይጠቀማሉ? (እርግጠኛ ካልሆኑ በግምት ይናንሩ): ሰዎች ውሃ ሞልተው ለመውሰድ ለምን ያህል ጊዜ ሰልፍ ላይ መጠበቅ አለባቸው?
የውሃ ወ	ያጠን
10.	የሚታወቅ ከሆነ ፤ የዚህ ውሃ ጣቢያ የተለመደው የውሃ ፍስት መጠን በደቂቃ ምን ያህል ሊትር ነው? አላውቅም

- 11. በአጠቃላይ ከዚህ የውሃ ጣቢያ የሚገኘው የውሃ መጠን ለሙሉ ዓመት በቂ ነው? ካልሆነ ሰዎች ምን ያደር*ጋ*ሉ? የውሃ ጥራት
  - 12. ከዚህ የውሃ ጣቢያ የሚገኘው ውሃ ለመጠፕ አስተማማኝ ነው ብለው ያምናሉ? ለምን?
  - 13. የዚህ የውሃ ጣቢያ የውሃ ጥራት የሚለካ ከሆነ በምን ያህል ጊዜ ይለካል?
    - ሀ. ቢያንስ በዓመት 12 ጊዜ
    - ለ. ከ12 ጊዜ ያነሰ ሆኖ በዓመት ቢያንስ 4 ጊዜ ይለካል
    - ሐ. ከ4 ጊዜ ያነሰ ሆኖ በዓመት ቢያንስ I ጊዜ ይለካል
    - መ. በዓመት አንድ ጊዜ
    - w. በዓመት ከ ጊዜ ያነሰ
    - ረ. ፕራቱ አይመረመርም
  - 14. የውሃ ጥራት ምርመራው ውጤት በውሃው ውስጥ መኖር ከሚገባው የኬሚካል ንጥረ-ነገሮች መጠን በላይ መኖሩን ካሳየ (ለምሳሌ እንደ ፊካል ባክቴሪያ፣ ከፍተኛ መጠን ያለው ፍሎራይድ ወይም አርሰኒክ(መርዝ)፣ ወዘተ) ምን ይደረጋል/ምን ይፈጣራል?
  - 15. ከዚህ በፊት የተደረገ የውሃ ጥራት ምርመራ ተመዝግቦ ይቀመጣል? ይህ መረጃ ተመዝግቦ ተይዞ ከሆነ ለጣይት እቸላለሁ? አዎ/አይ

**(ቃለመጠይቅ አድራጊ:** ከቻሉ ፎቶግራፍ ያንሱት ወይም ፎቶ ኮፒ አድርገው ይያዙት፡፡ የየትኞቹ ዓመታት መረጃ ተመዝግቦ ሕንዴሚንኝ ይግለፁ፣ የውሃ ምርመራው ምን ምነ አገሮች ሕንዴተመረመሩ ፣ ምርመራው በምን ያህል የጊዜ ልዩነት ሕንዴተከናወነ (ለምሳሌ በየወሩ፣ በየዓመቱ) የመሳሰሉትን ይግለፁ

# የውሃ ልኪቶች መብለጥ የሌለባቸው: **ፊካል ኩሊፎርምስ ፣ ፊካ ስተሪፐቶኮሲ ወይም ኢኮላይ፡** በየ100 ሚሊ ከ0 ያልበለጠ **አርስኒክ/መርዝ፡ uK=f Ÿ0.01 ሚሊ ግራም ያልበለ**ጠ **ፍሎራይድ፡** በሊትር ከ0.5ሚሊ *ገራም* ያልበለጠ

ህ. የተመዘገበ መረጃ ካለ፡ *ቃለመጠይቅ አድራጊ*፡ የምርመራው ውጤት በውሃው ውስጥ

የሚገኙ የኬሚካል ንጥረ ነገሮች ተቀባይነት ካለው የብሄራዊ የልኬት ደረጃ ባላይ

አልፈው እንደሆነ ጣታወሻ ይያዙ (የብሄራዊ የልኬት ደረጃውን በሳጥኑን ውስጥ

### *ይመልከቱ*):

١.	ዓመት/ወር: _	የተመረመረው ነገር:	የምርመራው ውጤቱ:
2.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመራው ውጤቱ:
3.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመራው ውጤቱ:
4.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመራው ውጤቱ:
5.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመራው ውጤቱ:
6.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመራው ውጤቱ:
7.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመራው ውጤቱ:
8.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመረው ውጤቱ:
9.	ዓመት/ወር: _	የተመረመረው ነገር:	_ የምርመራውውጤቱ፡

#### የውሃ ጣቢያን ባለበት ጠብቆ ማቆየት እና ጥና

- 16. ይህ የውሃ ጣቢያ አገልግሎት እየሰጠ/እየሰራ መሆኑን የመከታተል ሃላፊነት ያለበት ማነው? የውሃ ፅ/ቤት የሚጫወተው ሚና አለ? ካለ የሚጫወተው ሚና ምንድን ነው?
- 17. ተገና በየስንት ጊዜው ማድረባ ያስፈልጋል? በተደጋጋሚ የሚከሰቱት ቸግሮች ምንድን ናቸው?
- 18. የውሃ ጣቢያው ሁል ጊዜ በአግባቡ አገልግሎት ሳያቋርጥ እንዲሰጥ/እንዲሰራ ለማድረግ በቀዳሚነት እንቅፋት የሆኑ ተግዛሮቶች ምንድን ናቸው?

### ክፍያዎች

20.	ገንዘብ ተገንቷል! የውሃ አገልግሎት ለማግኘት የሚከፈሉ ክፍያዎች ካሉ እባክዎ ይግለጹ ሀ. ዓመታዊ ክፍያ:			
	ለ. በተጠቀሙ ቁጥር የሚከፌል ክፍያ:	10 ሊትር ለሚይዝ እቃ/	20 ሊትር ለሚይዝ እቃ:	

19. ለውሃ ፣ የአካባቢ ፅዓትና የባል ንፅህና ኮሚቴ ክፍያ የሚሆን ምን የገንዘብ ምንጮች አሉ! ከተለያዩ ምንጮች ምን ያህል

- 21. ተጠቃሚዎች መክፈል የሚጠበቅባቸውን ክፍያዎች በተጨባጭ በምን ያህል ደረጃ ይከፈላሉ? ከውሃ አገልግሎት ክፍያ ሊሰበሰብ ከታቀደው ምን ያህሉ ይሰበሰባል? (*ይህ አስራር የሚታወቅ ከሆነ*)?
- 22. ከውሃ አንልግሎት ክፍያ የሚሰበሰበው ንንዘብ የውሃ ጣቢያውን ባለበት ጠብቆ ለጣቆየትና ለተገና የሚያስፌልጉ ወጪዎችን በምን ያህል ጀረጃ ይሸፍናል? የጣይሸፍን ከሆነ የገንዘብ ክፍተቱ ምን ያህል ትልቅ ነው? ይህንን የገንዘብ ክፍተትስ እንኤት ይሞሉታል?
- 23. ክፍያዎችን መዝባበው ይይዛሉ? ማየት እንችላለን?

ሐ. ሌላ ክፍያ ካለ (ይግለፁ):

#### ስለተመለከተቸው ለውጦች አስተያየት

- 24. የውሃ አቅርቦቱ/ጣቢያው ከተገነባ ጊዜ ወዲህ የውሃ፣ ፅዳት እና የግል ንፅህና ኮሚቴ የውሃ አቅርቦቱን/ጣቢያውን የሚያስተዳድሩባቸው መንገዶች ባለፉት የተወሰኑ ዓመታት ውስጥ ምን ያህል ተቀይረዋል? እንኤት ነው የተቀየረው/የተለወጠው? የተደረገው ለውጥ ለተሸለ ነገር ነው ወይስ ወደባስ ችግር የሚከት?
- 25. ስለዚህ የውሃ ጣቢያ ወይም ስለተገነባው ድርጅት ከእኔ ጋር ሊወያዩበት የሚፈልጉት ነገር አለ?

# i. Structured Group Interview with One or Two Water Collectors (Amharic)

የውሃ ጣቢያዎች ተጠቃሚ ከሆኑ አንድ ወይም ሁለት ውሃ ቀጂዎች ጋር የሚደረባ የተደራጀ ቃለ መጠ

ውሃ አቅርቦትን ለማዳረስ የተዘረጋው	
የውሃ አቅርቦት ስርዓት ስም፡	ቀበሴ፡
የውሃ ጣቢያው ስም:	
የሚሊኒየም የወተር አሊያንስ ኢትዮጵያ	
(MWA-EP) ተገባሪ:	<i>መ</i> ንደር:
ወረዳ:	የውሃ አቅርቦት ስርዓት/የውሃ ጣቢያው
	የሚተዳደረው በ:

ምላሽ ሰጪ	ጺታ	<i></i> እድመ	እዚህ አካባቢ የነሩበት ዓመት ቁጥር
ቃለ <i>መ</i> ጠይቅ ሰጪ <i>ግ</i> ለሰብ ቁጥር l			
ቃለ መጠይቅ ሰጪ ግለሰብ ቁጥር 2			

## 

#### የአጠቃቃም ሁኔታዎች

- I. ወደዚህ የውሃ ጣቢያ ምንያህል ይመጣሉ?
- 2. ወደዚህ ውሃ ጣቢያ በመጡ ቁጥር ውሃ ቀድቶ ለመሄድ ወረፋ በመጠበቅ ምን ያህል ጊዜ ያጠፋሉ?
- 3. የቤተሰቡን የለት-ተለት የውሃ ፍላጎት እና ፍጆታ ለማሟላት ሲሉ ተጨማሪ ውሃ ከሌላ ከማንኛውም ቦታ (የውሃ መገኛ) ቀድተው ያውቃሉ? መልሱ አዎ ከሆነ ለምን? ይህን ተጨማሪ ውሃ የሚቀዱት ከየት ነው?
- 4. ከዚህ የውሃ ጣቢያ የሚቀዱት/የሚያንኙት የውሃ መጠን በቀን ውስጥ ያለዎትን የውሃ ፍላንት/ፍጆታ በበቂ ሁኔታ የሚያሟላ ነው?
  - ህ. ዓመቱን ሙሉ ተመሳሰይ መጠን ያለው ውሃ ያገኛሉ ወይንስ ከወቅት ወቅት የተለያየ መጠን ያለው ውሃ ነው የሚያገኙት?
- 5. ይህንን ውሃ የሚጠቀሙበት ለምን ለምን አገልግሎት ነው?
- 6. ይሄ ውሃ ለመጠፕ ይሆናል/ ደህንነቱ የተጠበቀ እንደሆነ ይሰማዎታል? ለምን ይመስልዎታል? ለምን አይመስልዎትም?
- 7. የዚህ ማህበረሰብ አባል የሆነ ሰው ሁሉ ከዚህ የውሃ ጣቢያ እኩል መጠቀም ይቸላል? ለምን?
- 8. ከዚህ የውሃ ጣቢያ መጠቀም የጣይቸሉት ሰዎች የትኞቹ ናቸው? ለምን?
  - ህ. **የማዉጣሜ ጥያቄ፣** ሃብት ያላቸው ሰዎች ፤ የተወሰነ ጾታ እና አቅመ-ደከጣ የሆኑ የማህበረሰብ ክፍሎች የውሃ ጣቢያውን የማይጠቀሙ እንደሆነ እያውጣጡ ይጠይቁ

### የውሃ ጣቢያ አስተዳደር ሁኔታ

- 9. የውሃ ጣቢያውን የሚያስተዳድረው ማነው?
- 10. የውሃ ጣቢያው ምን ያህል በደህና/በጥሩ ሁኔታ እየተዳደረ ነው ብለው ያስባሉ? ለምን?
  - ሀ. የሚያስተዳድሩት አካላት በጥር ሁኔታ እያከናወኑ ያሉት ነገር ምንድን ነው?
  - ለ. የሚያስተዳድሩት አካላት በተለየ/በሌላ መንገድ ሊያከናውኑት የሚገባ ነገር ምንድን ነው?
- 11. የውሃ ጣቢያው አንልግሎት ከመስጠት ጋር በተያያዘ ችግሮች ኢጋተመው ያውቃል? ከሆነ ምን አይነት ችግሮች አጋጠመው ያውቃሉ? እነዚህን ችግሮች እንኤት ተፈቱ? ችግሮቹ በጣን ተፈቱ?
- 12. የውሃው ጣቢያው አንልባሎት መስጠት ባቆመ ጊዜ ምን አደረጉ?
- 13. በጊዜ ሂደት ይህ የውሃ ጣቢያ የሚተዳደረበትን ወይም የሚጠንነበትን መንገድ በተመከተ ምን አይነት ለውጦች ተመለከቱ?

#### የንንዘብ ምንጭ

- 14. ከዚህ የውሃ ጣቢያ ለመጠቀም/ለመቅዳት ምን ያህል ይከፍላሉ? ይህ ክፍያ እርሶና ቤተሰብዎ ለመክፈል የምትችሉት (ከመክፈል አቅጣችሁ ጋር ተመጣጣኝ) ነው?
- 15. ሁሉም ሰው የውሃ አንልግሎት ለማግኘት/ለመቅዳት የሚከፍለው ክፍያ ተመሳሳይ ነው? ካልሆነ ለምን?
- 16. ለውሃ አገልግሎት ክፍያ የሚከፈለው ክፍያ ባለፉት 8 ዓመታት ውስጥ ተቀይሮ የሚያውቅ ከሆነ እንዴት ነው የተቀየረው?
- 17. ስለዚህ የውሃ ጣቢያ ወይም የውሃ ጣቢያው እንኤት እንደሚተዳደር ሊነግሩኝ ሚፈልጉት ሌላ ነገር አለ?

# 4. Structured Observation Forms (Amharic)

# a. Structured Observations at Water Points (Amharic)

# በውሃ ጣቢያዎች ላይ የሚደረባ የተደራጀ ምልከታ

		መንደር:	
Om Om	ተገበው ስርዓት ስም፡ ^ አመ የመታር አላ የንእ አ ትውልና	 በቦታው ላይ ልናነ <i>ጋግረ</i> ው የምንቸለው ሰው	
(11)	VVA-EP) ፕሬክሪ/አበፌዳሚ:	ስም: በቦታው ላይ ልናነ <i>ጋግረው የምን</i> ቸለው ሰው	
WZ.	મઃ 		
1.0		ስልክ ቁጥር:	
Ф(1(	ሌ፡		
_		n:	
<i>ጎ</i> ጥ፡	:	የውሃ አቅርቦት ስርዓቱ ዓይነት፡	
ከዚ: 	ህ የውሃ አቅርቦት ስርዓት <i>ጋ</i> ር ተያያዥነት	· ያላቸው ወይም በዚህ የውሃ አቅርቦት ስርዓት የተ <i>ነ</i> ነቡ ውሃ ጣቢያዎች ቁጥር	
የው	ሃ ጣቢያዎች በተናጠል የሚተዳደሩ ከሆ	ነ እያንዳንዱን የውሃ ጣቢያ የሚያስተዳድሩ አካላትን ይዘርዝሩ፡	
በው	-ሃ ምንጭ/ጮች ላይ የሚደረ <i>ጉ</i> ምልከታ	ዎች (ከውሃ ጣቢያው/ዎች የተለየ/የተለዩ ከሆነ/ኑ)	
በው	·ሃ ጣቢያ ቁጥር   ላይ የሚደረ <i>ጉ</i> ምልከ	ታዎች	
	በውሃው ጣቢያው ላይ ምን ያህል ሰዎ		
		<sub></sub> ሥላት ሰልፍ እየጠበቁ ነው! (የውሃውን መጠን ለማወቅ የውሃ <i>መያ</i> ዣውን እቃ <i>ት</i>	ኒይነት
	ይለዩ)		
3.	በውሃ ጣቢያው የተሰበሰቡ ሰዎች ምን	አይነት ሰዎች እንደሆኑ ይባለፁ? (ለምሳሌ በጾታ ፣ በእድሜ)	
4.	የመታጠቢያ ንንዳዎች አሉ?		
5.	<i>ማ</i> ልሱ አዎ ከሆነ እነዚህ የ <i>ማታ</i> ጠቢያ ነ	ነንዳዎች ጥቅም ላይ ለመዋላቸው የሚያመላክት	
	ነገር አለ?		
6.	የከብት ውሃ መጠጫ ንድጋዶች አሉ?		
	<i>ማ</i> ልሱ አዎ ከሆነ በተቅም ላይ የዋሉ <i>ወ</i>		
7.	በአሁሉ ወቅት ውሃ <i>እያመነ</i> ጨ/እየሰጥ	የሚገኝ የውሃ ጣቢያ አለ? አዎ/አይ	
8.	በእጅ የሚገፋ አይነት ከሆነ እጀታው 9	Pን ያህል ጊዜ ከተገፋ በኃላ ውሃ መውረድ እንደጀመረ ይመዝባቡ ይመዝባቡ:	
9.		እቃውን ለመሙሉት ምን ያህል ጊዜ እንደሚወስድ ለማወቅ ሰዓት/ደቂቃ ይያዙ	:: ,ev
10		'ነ የውሃ መቅጃ እቃውን ለመሙላት ስንት ጊዜ እጀታውን እደተገፋ ይቁጠሩ፡፡ .ቃ ለመሙላት የወሰደው ሴኮንዶች:	
		,ቃ ለመውላተ የወበደው ቤተንዶተ: ቃ ለመሙላት እጀታውን ስንት ጊዜ ተገፋ:	
		ው ለውሙ ለስት አደታው 7 (በንኮ ጊዜ የጉፋ. ተኛ የሆነ ውሃ የማንጠባጠብ / የመፍሰስ ችግር ካዩ ይመዝግቡ፡፡	
		ንደማ የስፈልኅው በማልድ የማ ታe. ከሆነ ማስታወሸ e.eዙ::	

**በውሃ ጣቢያ ቁጥር 2 ላይ የሚደረጉ ምልከታዎች** (ከላይ የተቀመጡትን ተያቄዎቹን እስከ 4ኛው የውሃ ጣቢያ ድረስ ይድገሙ) **በውሃ ጣቢያ ቁጥር 3 ላይ የሚደረጉ ምልከታዎች** 

14. በአጠቃላይ በሚታዩ ተግዛሮቶች እና ስጋቶች ላይ አስተያየት ይስጡ

በውሃ ጣቢያ ቁጥር 4 ላይ የሚደረጉ ምልከታዎች

# b. Structured Observations of Household Latrines (Amharic)

# በአባውራ ደረጃ የተገነቡ የመፀዳጃ ቤቶች ላይ የሚደረግ የተደራጀ ምልከታ

የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ		
የውሃ አቅርቦት ስርዓት ተግባሪ:	መንደር:	
ወረዳ :		
<u> </u>		

በአካባቢው ከሚገኙ የማህበረሰብ መሪዎች/አለቆች ወይም ከሌሎች በማህበረሰብ ውስጥ እውቀት ካላቸው ሰዎች *ጋ*ር አብሮ በመስራት አባውራዎች በአሜሪካ የልማት ድርጅት ዪ.ኤስ.ኤ.አይ. ዲ (USAID) የገንዘብ ድጋር በሚንቀሳቀሰው የሚሊኒየም ወተር አሊያንስ ፐሮግራም ውስጥ በመሳተፋቸው የተገነቡ የመፅዳጃ ቤቶች የትኞቹ እንደሆኑ ይለዩ፡፡ እያንዳንዱን መፅዳጃ ቤት እየነበኙ የሚከተሉትን ምልከታዎች ይሙሉ፡፡

### መፀዳጃ ቤት ቁጥር Ι:

<ol> <li>ይህ መፀደጃ ቤት የሚሊኒየም ወተር አልያንስ ኢትዮጵያ ፕሮጀክት በሚተነበርበት ወቅት በአባውራው የተነነባ ነው?</li> </ol>	<i>አዎl አ</i> ይደለም/ <i>አ</i> ላውቅም
3. ይህ መፀዳጃ ቤት የተገነባው መቼ ነው?አላውቅም	በዓ. ም መቼ እንደተ <i>ገ</i> ነባ አላውቅም
4. ለየፆታው የተወሰነ/የተመደበ	የሴት/የወንድ/በፆታ ያልተለየ (ጣኛውም ሰው ሊጠቀምበት የሚችል)
ሀ. ለየጾ <i>ታው የተሰየ ከሆነ፡</i> የአንዱ ፆታ መፀዳጃ ቤት ከሌሳው ጾታ የተሰየው እንዴት ነው? (በግድግዳ ወይም ተራርቆ በመገንባት)	አዎ/አይ
5. የመፀዳጃ ቤቶች አይነት	ሀ. ልዩ/ከፍተኛ ደረጃ ያለው ለ. ውሃ ጣቆሪያ ያለው እና ውሃ የሚለቅ ሐ. ባህላዊ የጉድጓድ መፀዳጃ ቤት ሆኖ ወለሉ የሚታጠብ - የሲሚንቶ ወለል መ. ባህላዊ የጉድጋድ መፀዳጃ ቤት ሆኖ ወለሉ የማይታጠብ - የአፈር ወለል ሥ. አነስተኛ የተቆፈረ ጉድጓድ ሆኖ የተከለለ/ከለላ ያለው

	ረ. ሴላ አይነት ካለ ይባለጹ
6. በመፀዳጃ ቤቱ ውስጥ በቁጥር ስንት የመጠቀሚያ ክፍሎች አሉ?	በቁጥር:
5.I. መፀዳጃ ቤቱ ለተጠቃሚዎች ክፍት ነው (አልተቆለፈም)	<i>አዎ/</i> አይደለም
5.2. መፀዳጃ ቤቱ ጥቅም ላይ መዋሉን የሚያመላክት ግልጽ ማስረጃ አለ? (ሽታ ካለ ፣ የጉድጋዱን ውስጥ ይመልከቱ)	አዎ/አይ
	ማስታወሻ :
5.3. የመፀዳጃ ቤቱ ሙሉ ለሙሉ የተሸፌነ ስው በነፃነት ሊጠቀምበት የሚችል ነው? (ዙሪያውን ግድግዳ የተሸፌነና ሙሉ ለሙሉ የሚዘጉ በሮች ያሉት)	አዎ/አይ
5.4. በሩ ከውስጥ ይቆለፋል?	<i>አ</i> ዎ/አይ
5.5. የባንባታው አስተጣጣኝነት (አስተጣጣኝ የሆነ ወለል፣ ባድባዳና ጣሪያው የጣይነቃነቅ/የጣይወላልቅ)	አዎ/አይ ማስታወሻ: 
5.6. አካል ጉዳተኞች በቀላሉ ሊመጠቀሙበት የሚቸሉት ነው? (ለምሳሌ ደረጃ የሌለው ፣ በውስጡ ለመደገፊያነት የሚያገለግሉ ሃዲዶች እና እጀታዎች ወይም መደገፊያ ፣ መቀመጫ ያለው)	አዎ/አ <u>ይ</u>
5.7. የፅዓት ሁኔታ፡ የፅዓት ደረጃው ተቀባይነት ባለው ደረጃ የሆነ (በሽንት የለተበከለ ፤ በስንኤ እና ምቅም ለደ	<i>አ</i> ዎ/አይ

በዋለ የመፀዳጃ ቤት ወረቀት	
ያልጨቀየ/ያለተጨማለቀ)	
5.8. ሽታ፡ ተቀባይነት ያለው ሽታ (ምንም ሽታ የሌለው	<i>አ</i> /አይ
ወይም ሊቋቋሙት የሚቻሉት መጠነኛ ሽታ ያለው)	
	ጣታወሻ:
	, .
5.9. ዝንቦች፡ ቁጥራቸው ከሶስት ያነሱ/የማይበልጡ ዝምቦች	አዎ/አይ
በመፀዳጃ ቤቱ ካሉ	
7. በመፀደጃ ቤቱ ውስጥ ባሉ በማንኛውን ክፍሎች ውስጥ ወይም	<i>አ</i> ዎ/አይ
በአቅራቢያቸው ለቂጥ <i>መ</i> ጥረጊያ/ማጽጃ የሚ <i>ያገ</i> ለግሉ ቁሳቁሶች እንደ ወረቀት ወይም ውሃ በእቃ አለ?	
8. ቁሳቁሶቹን ፎቶግራፍ ያንሱ	
9.  ማስታወኘ፡	

የመፀዳጃ ቤት ቁጥር 2፡	፡ (ከላይ ያሉትን	<i>ጥያቄዎ</i> ች  እስከ	8ኛው መፀዳጃ	ቤት ይደገሙ)
-----------------	-------------	--------------------	----------	----------

የመፀዳጃ ቤት ቁጥር 3፡

የመፀዳጃ ቤት ቁጥር 4፡

የመፀዳጃ ቤት ቁጥር 5፡

የመፀዳጃ ቤት ቁጥር 6፡

የመፀዳጃ ቤት ቁጥር 7፡

የመፀዳጃ ቤት ቁጥር 8፡

# የእጅ መታጠቢያዎች

١.	ለእጅ መታጠቢያ እንዲሆን ታስቦ በማንኛውም አይነት እቃ የተዘጋጀ ውሃ በአቅራቢያው አለ? ሙሉም ሆነ ንዶሉ	አዎ/ አይ
2.	የእጅ መታጠቢያ ውሃ የያዘውን እቃ ፎቶግራፍ ያንሱት	

	3.	የእጅ መታጠቢያ ውሃ የያዙት እቃዎች የት ነው የተቀመጡት? (ትክክለኛውን የሆነውን ሁሉ ያክብቡ)	1.1. ከመፀዳጃ ቤቱ አጠንብ 1.2. ሌላ ካለ ይባለጹ:
	4.	ዛሬ ለእጅ መታጠቢያ በተዘጋጁት በጣንኛውም የውሃ መያዣ እቃዎች ውስጥ ውሃ አለ?	አዎ/ አይ
1	5.	ዛሬ ለእጅ መታጠቢያ በተዘጋጁት እቃዎች ላይ ሳሙና አለ?	አዎ/አይ
	6.	ዛሬ ሰዎች መፀዳጃ ቤት ተጠቅመው ሲወጡ እጃቸውን መታጠባቸውን የሚያመላክት ነገር አለ? (ለምሳሌ መሬቱ ወይም ሳሙናው እርጥብ ከሆነ)	<i>አዎ/</i> አይ
	7.	ዛሬ መፀዳጃ ቤት ከተጠቀሙ በኃላ እጃቸውን ሲታጠቡ የተመለከቷቸው ሰዎች አሉ? መልሱ አዎ ከሆነ ጾታቸውን ያስቀምጡ	አዎ/ አይ
			<i>መ</i> ስታወሻ: 
	8.	ዛሬ መፀዳጃ ቤት ከተጠቀሙ በኃላ እጃቸውን ያልታጠቡ ሰዎች ተመልክተዋል? ከተመለከቱ ጾታቸውን ይግለጹ	አዎ/ አይ
			<i>መ</i> ስታወሻ:

# c. Structured Observations of Shared Community Latrines (Amharic) የማህበረሰብ የ*ጋራ መጠቀሚያ በሆኑ የመፀዳ*ጃ ቤቶች ላይ የሚከናወን የተደራጀ ምልከታ

በአሜሪካ የልማት ድርጅት ዪ.ኤስ.ኤ.አይ. ዲ (USAID) በሚያገኝ የገንዘብ ድጋር የሚሊኒየም ወተር አሊያንስ አጋር አካላት የተገነቡ የጋራ መፀዳጃ ቤቶች የትኞቹ እንደሆኑ ለይቶ ለማወቅ በአካባቢው ከሚገኙ የማህበረሰብ መሪዎች/አለቆች ወይም ከሌሎች በማህበረሰብ ውስጥ እውቀት ካላቸው ሰዎች ጋር አብሮ መስራት፡፡ እያንዳንዱን መፀዳጃ ቤት እየነበኙ የሚከተሉትን ምልከታዎች ይሙሉ፡፡

አጋር ተባባሪ አካላት:		መንደር:				
		ምልከታ የተደረገበት ቀን፡				
		ምልከታ የተደረገበት ጊዜ/ሰዓት፡				
		ምልከታውን ያደረገው ሰው፡	_			
መፀዳጃ በ	ታ <i>ህን</i> ፃ ቁጥር  :					
Ι.	ይህ መፀደጃ ቤት በሚሊኒየም ወተር አፅ የተገነባ ነው?	እያንስ ኢትዮጵያ <i>አዎ/</i> አይደለም /አላውቅም				
2.	ይህ መፀዳጃ ቤት የተገነባ መቼ ነው?	n9. 9¤				
		አላውቅም				
3.	ለየፆታው የተወሰነ/የተመደበ	የሴት/የወንድ/በጻታ ያልተለየ (ማንኛውም ሰው ሊጠቀምበት የሚችል)				
	ሀ) በጾታ የተለየ ከሆነ፡ የአንዱ ፆታ መ ፆታ ተለይቶ የተገነባ ነው? (በግድ። በመገንባት)					
4.	የመፀዳጃ ቤቶች አይነት	υ. ከፍተኛ ደረጃ ያለው ልዩ				
		ለ. የውሃ ማቆሪ ያለውና ውሃ የሚለቅ  ሐ. ባህላዊ የጉድጋድ መፀዳጃ ቤት ሆኖ ሊታጠብ የሚቸል (በሲሚንቶ የተሰራ ወለል)  መ. ባህላዊ የጉድጋድ መፀዳጃ ቤት ሆኖ ሊታጠብ የማይቸል ወለል - አፈር  ሥ. ሌላ አይነት ካለ ይግለጹ				

የሚሊኒየም ወተር አሊያንስ ኢትዮጵያ

5. በመፀዳጃ ቤቱ ውስጥ በቁጥር ስንት ክፍሎች/ክፍልፋዮች አሉ?	ቀፕር:
ሀ. ለተጠቃሚ ክፍት የሆኑ (ያለቆለፉ) ስንት የመፀዳጃ ቤት ክፍሎች አሉ?	ቀጥር:
ለ. ምልከታውን የሚያከናውኑ ሰዎች ሊ <i>ገ</i> ቡባቸው የቻሉባቸው የመፀዳጃ ቤት ክፍሎች ቁጥር፡	ቁጥር:
ሐ. ሰዎች በመፀዳጃ ቤቱ ክፍሎች እየተጠቀሙባቸው እንደሆነ የሚያመላክት ግልጽ ማስረጃ በስንት ክፍሎች ውስጥ አለ? (ሽታ ካለ ፣ የጉድጋዱን ውስጥ ይመልከቱ፡፡ ክፍሎቹን ሰዎች እየተጠቀሙባቸው እንደሆነም ይመልከቱ)	<u>ቀ</u> ፖር:
መ. በሚገባ የተከለሉ እና ሰዎች በነጻነት ሊጠቀሙባቸው የሚችሉ የመፀዳጃ ቤት ክፍሎች በቁጥር ስንት ናቸው (ግድግዳዎችና ሙሉ በሙሉ መዘጋት የሚችሉ በሮች ያላቸው መሆኑን)	ቀፖር:
ሥ. በውስጥ በኩል የሚቆለፍ በር ያላቸው የመፀዳጃ ቤት ክፍሎች ቁጥር ስንት ናቸው? 	ቁፕር:
ረ. ግንባታቸው አስተማማኝ የሆነ የመፀዳጃ ቤት ክፍሎች በቁጥር ስንት ናቸው? (አስተማማኝ ጥብቅ የሆነ ወለል፤ ግድግዳና ጣሪያው የማይነቃነቅ/የማይወላልቅ)	<b>ቀ</b> ጥር:
ሰ. ልጆች እና አካል ጉዳተኞች በቀላሉ ሊጠቀሙባቸው የሚችሉ የመፀዳጃ ቤት ክፍሎች በቁፕር ስንት ናቸው? (ለምሳሌ ደረጃዎች የሌላቸው ፣ በክፍሎቹ ውስጥ ለመደገፊያነት የሚያገለግሉ ሃዲዶችና	<b>ቁ</b> ፕር:

እጀታዎች ፤ መቀመጫ እና ጠባብ የመፀዳጃ ቤት ቀዳዳዎች መኖራቸው)	
ረ. የፅዳት ሁኔታ፡ ተቀባይነት ባለው ደረጃ ፅዳት ያላቸው የመፀዳጃ ቤት ክፍሎች ስንት ናቸው (በሽንትና በሰገራ ያልጨቀየ ፤ ተቅም ላይ በዋለ የሽንት ቤት ወረቀት ያለተጨማለቀ)	<b>ቁጥር:</b>
ሸ. ሽታ፡ ተቀባይነት ያለው ሽታ ያላቸው የመፀዳጃ ቤት ክፍሎች ቁጥር ስንት ናቸው (ሽታ የሌላቸው፤/የማይሸቱ ወይም በመጠኑ የሚሸቱ፤ ለመቋቋም የሚቻል ሽታ ያላቸው)	<b>ቁጥር:</b>
ቀ. ዝንቦች፡ አነስተኛ የዝንቦች ቁጥር የሚታዩባቸው የመፀዳጃ ቤት ክፍሎች (ከ 0 – 3)	ቀጥር:
6. በመፀዳጃ ቤቱ ክፍሎች ውስጥ ወይም በአቅራቢያቸው ለቂጥ መጥረጊያ / ማፅጃ የሚያገለግሉ ቁሳቁሶች እንደ ወረቀት ወይም ውሃ በእቃ ይገኛሉ?	አዎ/አይ
7. ዛሬ እነዚህን መፀዳጃ ቤቶች ማንኛውም ሰው ሲጠቀምባቸው ተመልክተዋል?	ሴት ወንድ ሴት ልጆች
	ወንድ ልጆች
8. <i>GP 764 93</i> h	
9. ማስታወሻ:	

**የመፀዳጃ ቤት ቁጥር 2** (እስከ አራተኛው መፀዳጃ ቤት ድረስ ከላይ የተቀመጡትን ጥያቄዎቹ ይድገሙ) **የመፀዳጃ ቤት ቁጥር 3** የመ<mark>ፀዳጃ ቤት ቁጥር 4</mark>

# የእጅ መታጠቢዎች

<ul><li>10. ለእጅ መታጠቢያ እንዲሆን ታስቦ በጣንኛውም አይነት እቃ የተዘጋጀ ውሃ በአቅራቢያው አለ? ሙሉም ሆነ ጎዶሎ ቢሆን</li><li>11. የውሃ መያዣ እቃውን ፎቶግራፍ ያንሱት</li></ul>	አዎ/አይ
12. የውሃ ማስቀመጫዎቹ የተቀመጡት የት ነው? (ትክክለኛ የሆነውን ሁሉ <i>ያ</i> ክብቡ)	υ. ከመፀዳጃ ቤቱ አጠንብ ለ. ሌላ ካለ ይ <i>ግ</i> ለጹ
13. ዛሬ ለእጅ ምታጠቢያ በተዘጋጁት በማንኛውም እቃዎች ውስጥ ውሃ አለ?	አዎ/ኢይ
14. ዛሬ ለእጅ መታጠቢያ በተዘጋጁት በጣንኛውም እቃዎች ላይ ሳሙና አለ?	<i>አ</i> ዎ/አይ
15. ዛሬ ሰዎች መፀዳጃ ቤት ተጠቅመው ሲወጡ እጃቸውን መታጠባቸውን የሚያመላክት ነገር አለ? (ለምሳሌ መሬቱ ወይም ሳሙናው እርጥብ ከሆነ)	<i>አዎ/አ</i> ይ
16. ዛሬ ሴት የመፀዳጃ ቤቱ ተጠቃሚዎች እጃቸውን ሲታጠቡ ተመልክተዋል?	አዎ/አይ
17. ዛሬ ወንዶቸ የመፅዳጃ ቤት ተጠቃሚዎች እጃቸውን ሲታጠቡ ተመልክተዋል?	<i>አ</i> ዎ/አይ

- 5. Interview Guides: Afan Oromo
- a. Informed Consent Statement to be Used for All Data Collection Efforts (Interviews, Focus Group Discussions) (Afan Oromo)

Walitti-qabsiisa C: Mixinee Gaafannoo Ragaan Ittiin walitti qabamu

Ragaa walitti qabuudhaaf yeroo yaaliin taasifamu hundatti kan hojii irra oolu fi ragaa kennitoonni gaaffii fi deebiii irratti hirmaacuudhaaf hubannoo gahaa argatanii ibsa fedhii isaanii ittiin ibsatan

## (Gaafannoowwan:-Maree garreedhaan taasifamu)

Harka fuune! Nuti Garee Ameerikaa ECODIT jedhamu bakka buunee asitti kan argamne yoo ta'u, USAID dhaan hubannoo hojii walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) bara 1996 hanga 2001tti gaggeeffame caalmaatti akka gargaaru gochuuf qorannoo raawwatamuudha.Gareen qorannoo kana adeemsisu qaama raawwii Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) olotti ibsamee miti. Nuti gamaggamtoota/ madaalttota bilisa yoo taanu, kan as jiruufis hojiiwwan pirojektichaan raawwatamanii fi pirojektichi erga xumuramee booda bu'aawwan isaan argamsiisan hamam akka ittifufe hubachuufiidha.

Gamaaggama /madaallii Kanaaf buufataaleen pirojektii/dhaabbata keessanii kan murtaa'an daawwachuuf kan filanne yoo ta'u, daawwannaa keenyaanis, buufataaleen bishaanii pirojektichaan ijaaraman tajaajila kennaa jiraachuu isaanii fi hojiiwwan dhiheessii kana waliin wal-qabatan walitti-fufiinsaan raawwatamaa jiraachuu isaanii beekuuf karoorfaneera. Asitti kan argamuu waa'ee hojiiwwan Walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) fi bu'aawwan argaman wali-fufiinsa akka qabaatan gochuu akka hin danda'amne sababiiwwan tarii gufuu ta'aniiru ta'an caalmaatti beekuuf akka nu dandeessisan isin haasofsiisuu ni barbaana. Odeeffannoon kun hojiiwwan gara fuulduraatti (USAID) Itoophiyaa keessatti raawwatu akka fooyyessuuf gargaaruu ni danda'a. Piroojektii kana irratti, hirmaannaa kan qabdan waan ta'eef dhimmoota kana hubachuu akka nu dandeessisuuf gaaffii fi deebii kana irratti akka hirmaattanii fi yaada keessan akka qooddan isin affeerreera. Kaayyoon keenya bu'aawwan argaman walitti-fufiinsa akka qabaataniif wanttooti gagaaran maal akka ta'anii fi gama biraatiin bu'aawwan argaman walitti-fufiinsa akka hin qabaanne wanttooti gufuu ta'an maal akka ta'an beekuuf waan ta'eef deebiin sirriidha yookin dogongora jedhu waan hin jirreef yaada keessan bilisa taatanii akka ibsitan ni barbaanna.

Mareen kun sa'a tokko ni fudhata. Gaaffii fi deebii kanatti hirmaachuu yoo hin barbaanne adabbii yookiin rakkoon isin irra gahu tokkoyyuu hin jiru. Maree kanatti yoo hirmaattan wanti isin yaaddessuu tokkoyyuu hin jiru.Hirmaachuu yoo filattan hojiiwwan kunneen naannolee Itoophiyyaa kan birootti haala fooyya'een akka hojiirra oolu deeggarsa gochuu keessan beekuun ala isiniifis ta'e dhaabbata keessaniif qophaatti faayidaa kan biraan inni argamsiisu hin jiru.

Mata dureewwan rakkoo uumuu danda'an /falmisiisoo ta'an kamiyyuu hin kaafnnu.Argamnni qorannoo Kanaa qindeeffamanii yeroo barreeffamanitti maqaa keessan yaada nuu kennitan maddii hin keenyu. Haa ta'u malee, dhimmoota tokko tokko irratti maqaa dhaabbata keessanii ibsuun nu barbaachisa ta'uu danda'a.Sagaleen keessan osoo hin waraabamin dhimmoonni akka mari'annu barbaaddan kamiyyuu yoo jiraate nati beeksisaa, anis meeshaan ittiin waraabu dhaabuu fi maqaan dhaabbata keessanii akka hin tuqamne fedhii isin qabadan nan kabaja.Yaada keessan bilisaan akka ibsitan ni barbaanna. Gaaffiiwwan deebisuu hin barbaanne yoo jiraatan rakkoo tokko malee itti hin deebi'u jechuu ni dandeessu.

Gaafadhaa: Gaaffii ni qabduu?
Gaafadhaa: Hirmaachuu ni barbaaduu?
Gaafadhaa: Sagaleen keessan akka waraabamu itti waliigaltuu?

Kaayyoo gaaffii fi deebii Kanaa ibsuu fi waliigaltee nama gaafatamuuu argachuuf mareen taasifame xumurameeraa? Eeyyeen \_\_\_\_\_ (mallattoo nama gaafii fi deebii taasisee)

Hirmaachuuf waliigaltanii? Eeyyeen \_\_\_\_\_ Lakki \_\_\_\_\_ (yoo itti walii hingallee , gaaffii fi deebicha dhaabaa)

# b. Key Informant/Group Interview - USAID Employee (Afan Oromo)

Hojjetaa (USAID) adda durummaan odeeffannoo kennu/gareedhaan gaaffii fi deebii taasifamu

Bakka	gaaffii	fi d	leebii:
-------	---------	------	---------

Maqaa/wwan:	_Gita/wwan hojii	Dhiira/Dubartii
Maqaa/wwan:	_Gita/wwan hojii	Dhiira/Dubartii
Maqaa/wwan:	_Gita/wwan hojii	Dhiira/Dubartii
Guyyaa gaaffii fi deebiin itti taasifame	Yeroo gaaffii fi de	ebiin itti taasifame
Maqaa nama gaaffii fi deebii taasisuu _ qabatuu	Maqaa nama yaad	dannoo

# GAAFFII FI DEEBII OSOO HIN JALQABIN DURA IBSA WALIIGALTEE ITTIIN GAAFATAN DUBBISTANII KANNEEN RAGAA KENNAN HUNDA IRRAA WALIIGALTEE ARGACHUU QABDU

#### Gaaffiiwwan (6)

- I. Pirojektii walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) (bara 1996 hanga 2001tti) jiru keessatti hirmaannaan isin qabdan maal ture)?
  - a. Pirojektii walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) kan hin beekne yoo ta'e, hojiin ammaa USAID keessatti hojjetan yoom eegaltan?
- 2. Waa'ee sosochii hojiiwwanii fi milkaa'ina Pirojektii walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) maal nati himuu dandeessu?
- 3. Waa'ee tooftaa hojimaata Pirojektii walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) pirojektoota kanneen duraa dhiheessii bishaanii, qulqullina naannoo fi kan dhuunfaa (WASH) addaan baatee ni qaba yoo ta'e karaa kamiin?

- a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Haala tooftaa hojimaata isaa maal yaadu?
- 4. Walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP)tiin , piroojektiin dhiheessii bishaanii, qulqullina naannoo fi kan dhuunfaa(WASH) waggaa 8 dura xumuramee erga cufamee booda, keessumaa bu'aawwan pirojektichaan argaman hangam walitti-fufiinsa qabaatanii akka ittifufan wanti beektan ni jiraa?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Tilmaamaan nati himuu ni dandeessuu? maaaliif?
- 5. Raawwiin Pirojektii Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) dhiheessii bishaanii, qulqullina naannoo fi kan dhuunfaa(WASH) taasifame irratti amalli dhaabbilee fi ittifayyadamtoota tajaajila Kanaa walitti-fufiinsa akka qabaatu sababnni/ kanneen gummachaa taasisan maalfaadha? Maaliif?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Baadiyyaa Itoophiyaa keessummaa, Bulchiinsa Naannolee Sabaa fi Sab-lammoota Ummattota Kibbaa, Oromiyaa fi Amaaraa keessatti bakka raabsa bishaanii, mana fincaanii walitti-fufiinsaan akka fayyadamanii fi walitti-fufiinsaan harka saamuunaadhaan akka dhiqatan gochuuf maal barbaachisa?
- 6. Pirojektiin Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) walitti-fufiinsa akka qabaatuuf gumaacha kan godhe ta'uu kan danda'uu fi haala qabatamaa Itoophiyaa qofaan bu'a qabeessa kan ta'ee fi nuti qorannoo kana kan adeemsifnu kan beekuu qabnnu sababnni adda ta'e jiraa? Yoo jiraate (USAID) sababa adda ta'e kana bara 2001 irraa jalqabee hojimaata bishaanii, qulqullina naannoo, fi dhuunfaa (WASH) irratti tilmaama keessa galcheeraa?
- 7. Qorannoo keenyaan amala hojii Pirojektii Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) adda kan ta'ee fi dhiheenyatti/xiyyeeffannaan kan nuti ilaalu qabna jettanii yaaddan jiruu?
- 8. Itoophiyaa keessatti dhiheessii bishaanii, qulqullina naannoo fi kan dhuunfaa waliin wal qabatee muuxannoo qabdan irraa ka'uudhaan pirojektoota dhiheessii bishaanii, qulqullina naannoo fi kan dhuunfaa (WASH) walitti-fufiinsa akka hin qabaanne wanttoonni yaaddoo guddaa ta'an maalfaadha?
  - a. Gaaffii hordofffii: Ragaa isaa eessatti argitan? Pirojektii Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) waliin wal-qabatee wanti argitan ni jiraa?
- 9. Itoophiyaa keessatti pirojektoota dhiheessii bishaanii, qulqullina naannoo fi kan dhuunfaa (WASH) irratti walitti-fufiinsa bu'aawwan argamanii fooyyessuuf hojimaata abdii namaa kennan agartaniittuu? Ibsaa.

# c. Key Informant Interview with Woreda/Kebele Water Office (Afan Oromo)

## Waajjira Bishaanii Aanaa/Gandaa Irraa Nama Adda-durummaan Ragaa Kennu Waliin Gaaffii fi deebii Taasifamu

вакка даанн и цеевн			
Maqaa/wwan:	_Gita/wwan h	ojii	Dhiira/Dubartii
Maqaa/wwan:	_Gita/wwan h	ojii	Dhiira/Dubartii
Maqaa/wwan:	_Gita/wwan h	ojii	Dhiira/Dubartii
Guyyaa gaaffii fi deebiin itti taasifame	Y	eroo gaaffii fi deebiin itti	taasifame
Maqaa nama gaaffii fi deebii taasisuu _	M	1aqaa nama yaadannoo	

# GAAFFII FI DEEBII OSOO HIN JALQABIN DURA IBSA WALIIGALTEE ITTIIN GAAFATAN DUBBISTANII KANNEEN RAGAA KENNAN HUNDA IRRAA WALIIGALTEE ARGACHUU QABDU

#### Shoora waliigalaa, ittigaaftamummaa, gaafatamummaa

- 1. Waajjirri bishaanii kun Aanaa/ganda kana keessatti dhiheessii bishaanii kana waliin gahuuf iskiimota raawwachuuf kaa'amanii fi kanneen hojiirra ooluu qaban gama deeggaruutiin shoorri inni bahu maalinni?
  - CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU Raawwii dhiheessii bishaanii irratti gosa leenjiiwwan kennamanii, hordoffii, dhiheessii bishaanii waliin gahuuf iskiimota ka'amanii fi hojiirra oolaa jiran gama raawwachiisuutiin, waa'ee suphaa fi dhiheessi bishaanii kana haala inni jirutti eeganii tursuuf hojiiwwan haala idileetiin raawwataman akka caalmaatti isinitti himaniif gaafadhaa.
  - GAAFFII HORDOFFII: Hojiiwwan olitti ibsaman an akka raawwatamaniif ittigaafatamummaan eenyuuf kenname? tokkoon tokkoon hojii Kanaa yeroo hamamii keessatti raawwatama?
  - GAAFFII HORDOFFII: Tokkoon tokkoon buufata bishaanii yeroo hamamiitiin daawwatama?

Dalder --- CC: Calcabile

- 2. Bishaanichi dhugaatiif amansiisaa ta'uu isaa eenyutu mirkaneessa?
  - Qulqullina bishaan kana mirkaneessuun attamitti raawwatama? (Waa'ee qulqullina bishaanii irratti akka caaalmaaatti isinitti himan gaafadhaa )
- 3. Koreen qulqullina bishaanii, kan naannoo fi dhuunfaa dhiheessii bishaanii waliin gahuudhaaf wixneewwan taa'anii fi kanneen raawwatamaa jiran gama deeggaruutiin shoora maalii bahu?
  - Deeggarsa koree bishaanii waliin wal-qabatee wanti bitaa namatti galuu fi dhimmicha irratti wanti ifa hin taane yoo jiraate akka caalmaatti isinitti himan taasisaa.
- 4. Dhiheessii bishaanii waliin gahuuf iskiimota taa'anii fi hojiirra oolaa jiran kana ilaalchisee koreewwan bulchan (WASHCOs) waliin haala kamiin walitti-dhufeenya taasiftu?
  - Yeroo hamamii keessatti akka wal-arganii fi walitti-dhufeenyichi karaa eenyuu akka taasifamu akka isinitti himan taasisaa?
- 5. Koree bishaanii, qulqullina naannoo fi dhuunfaatiif (WASHCOs) leenjii attamii kennitu?
- 6. Bara 2001 as dhaabbilee adda addaatiin sagantaaleen dhiheessa bishaanii, qulqullina naannoo fi dhuunfaa raawwataman hundi, hojimaata Mootummaan hirmaannaa dhiheessii bishaanii fi madaallii qabu irratti jijjiirama maalii fidan?

NAMA GAAFFII GAAFATU: Tarreeffama buufata bishaanii Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) tiin hojjetamanii fi kanneen irratti mari'achuu barbaadan namoota gaaffii gaafatamanitti agarsiisaa. Kanneen gaafataman kun buufataalee bishaanii kana kan beekan yoo ta'e, gaaffiiwwan itti aananii jiran buufataalee bishaanii kunneen irratti taasisuuf fedhii addaa akka qabdan hubachiisaa.

Buufataalee bishaanii kanneen hin yaadata yoo ta'e, akka waliigalatti waa'ee buufataalee bishaanii Aanicha yookiin gandicha keessatti argaman hundaa yoo dubbatan homaa miti.

### Suphaa

- 7. Buufataalee bishaanii Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) tiin deeggarsi taasifamuuf keessaa yeroo ammaa meeqan isaaniitu tajaajila kennaa akka jiran ni beektuu? Buufataalee bishaanii kannnen irratti rakkoon kamiyyuu gahee beeka yoo ta'e, rakkoowwan kun maalfaadha?
- 8. Buufataalee bishaanii Walta'iinsa Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) tiin deeggarsi taasifamuuf suphaan haala kamiin akka taasifamuu fi sadarkaa tokkoon tokkoon isaa irratti eenyu akka hirmaatu hubachuun barbaada.Mee Kanaan dura buufataalee bishaanii kanneen keessaa kan cabanii turanii fi tajaajila kennuu dhaabanii turan jidduudhaa waa'ee isa tokko yaadadhaa. Akka irra deebi'anii hojii eegalan gochuudhaaf maal akka raaawwatame nati himaa.

Akka baasanii isinitti himan gaafadhaa:

- Rakkoon ture maalinni? Attamitti beekame?
- Koreewwan bishaanii qulqullina naannoo fi dhuunfaa, waajjiraaleen bishaanii fi kanneen biroon shoora maalii bahan? Hirmaannaa gochuuf attamitti eegalan?
- Qaamni hundi hanga hirmaatutti yeroo hangam fudhate?
- Eenyutu suphaa kana raawwate?
- Ogeessa suphuu fi meeshaalee jijjiirraa gama argachuutiin rakkoon mudate jiraa? maaliif?
- Suphaa kana raawwachuuf yeroo hamamii fudhate?
- Suphaa Kanaaf attamitti kafalame?

- 9. Akka waliigalaatti, suphaa buufataalee bishaanii Kanaaf meeshaaleen oolan kan dhufan eessatii? GAAFFII HORDOFFII: Meeshaalee suphaaf barbaachisan argachuuf haman cimaadha?
- 10. Suphaawwan raawwachuuf deeggarsa ogummaa teekinikaa barbaachisan argachuuf hangam danda'amaa? GAAFFII HORDOFFII: Isin ykn koreen bishaanii, qulqullina naannoo fi kan dhuunfaa gama deeggarsa teekinikaa argachuutiin rakkoon kamiyyuu isin quunnamee beekaa?

#### Baasiiwwanii fi kafalttiiwwan tajaajilaa

- 11. Buufata bishaanii tokkoti fayyadamuuf kafalttii kafalamu kan murtteessuu eenyu?
- 12. Buufataalee bishaanii kana haala jiranitti eeganii turssuuf, baasii suphaa fi dhimmoota barbaachisoo ta'an yoo jiraatan eenyutu danda'a/kafala?
- 13. Gama baasiiwwan danda'uu/kafaluu fi gama kafalttii walitti qabuutiin wal-qabatee rakkoowwan yoo jiraatan rakkoowwan kunneen maalfaadha?
- 14. Baasiiwan guutumaa guutuutti danda'amuu/kafalamuu isa mirkaneefachuuf waan addaa maal gochuu danda'ama?

#### Yaadawwan

- 15. Waajjirri keessan buufataalee kana gama deeggaruutiin milkaa'eeraa?
  - CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Nama gaafatamuf, bu'a qabeessummaa/milkaa'inaaf hiiknni isin kennitan maalinni?
- 16. Buufatalee bishaanii kana gama deeggaruutiin hudhaawwan/ rakkoowwan isin quunnaman maalfaadha?
- 17. Wanti biraan naa waliin irratti mar'achuu barbaadan kamiyyuu jiraa?

### Saamuda waa'ee " faalamaa"

NAMA GAAFFII FI DEEBII TAASISU: Kanneen irratti mari'achuu barbaaddan tarreefama buufataalee bishaanii Walta'iinsa Itoophiyaa Jaarraa Kanaa (MWA-EP) tiin ijaaramanii fi gandootaa/iddoowwan walitti-dhufeenya qaban adda addaa itti agarsiisaa.Waaee tokkoon tokkoon isaanii ragaalee danda'ame gaafadhaa. NAMA YAADANNOO QABATUUF: Deebiiwwan hunda galmmeessaa.

I. Tarreefama gandaa fi bakka addaa kana yeroo ilaalttan akka walii-galaatti, naannolee kanattii bara 2001 booda dhiheessii bishaanii waliin gahuuf sagantaaleen haaraan jiraachuu isaanii hubannoo qabduu?

10	kkoon tokkoon isaa ibsaa:						
a.	Ganda:addaa:	Gooxii:	Bakka				
	Kan hojjetu / raawwatu (Dhaabbata gargaarsaa):						
	Gosa hojii hojjetamee / ra	awwatamee					
b.	Ganda:addaa:	Gooxii:	Bakka				
	Kan hojjetu / raawwatu (I	Dhaabbata gargaarsaa):					
	Gosa hojii hojjetamee / ra	awwatamee					
c.	Ganda:	Gooxii:	Bakka				

		Kan hojjetu / raawwatu (Dhaabbata ga	rgaarsaa):_			_	
		Gosa hojii hojjetamee / raawwatamee_					
	d.	Ganda:					_
		addaa:					
		Kan hojjetu / raawwatu (Dhaabbata ga	rgaarsaa):				
		Gosa hojii hojjetamee / raawwatamee					
	٩	Ganda:					_
	С.	addaa:			barria		
		Kan hojjetu / raawwatu (Dhaabbata ga	rgaarsaa):				
		Gosa hojii hojjetamee / raawwatamee_					
	f.	Ganda:					_
	1.	addaa:	_000x11		_Dakka		
		Kan hojjetu / raawwatu (Dhaabbata ga	rozarcza).				
		Gosa hojii hojjetamee / raawwatamee_					
		Gosa nojii nojjetamee / raawwatamee_					_
۷.	Bis	ra 2001 as tokkoon tokkoon hojiiwv haanii Itoophiyaa Jaarraa Kanaa (MV aachuu isaa ni beektuu?					
Ма	กลล	giddugaleessa/buufata bishaanii hojiin de	ehisəənii d	haahuu raawwatame	ef·		
ı ıa	.Yaa	giddagaicessai budiata bisilaaliii ilojiili de	.coisaaiiii di	naabuu raavvvvatame	CI.		
Ga	nda	:					
Go	oxii	:					
Bal	kka :	addaa:					
		nyutu deebisee dhaabee:		_ Hin beeku			
۷. ک	M <sub>2</sub>	om?Hin beeku aal raawwatan?					
٥.	1 la						
Ma	qaa	giddugaleessa/buufata bishaanii hojiin de	ebisaanii d	haabuu raawwatame	ef:		
C-	م ط م						
	nda:						
GC Dal	OXII	:					
Bai	кка	addaa:	_				
4.	Ee	nyutu deebisee dhaabee:		Hin beeku			
		om?Hin beeku		_			
		al raawwatan?					
					6		
Ma	ıqaa	giddugaleessa/buufata bishaanii hojiin de	ebisaanii di	naabuu raawwatame	et:		
Ga	nda	:					
Go	oxii	:					
Bal	kka	addaa:					
		nyutu deebisee dhaabee:		_ Hin beeku			
8.	Ϋ́ο	om?Hin beeku					

9. Maal raawwatan?						
Maqaa giddugaleessa/buufata bishaanii hojiin deebi	saanii dhaabuu raawwatameef:					
Ganda: Gooxii: Bakka addaa:	- -					
<ul><li>10. Eenyutu deebisee dhaabee: Hin beeku</li><li>11. Yoom? Hin beeku</li><li>12. Maal raawwatan?</li></ul>						
Maqaa giddugaleessa/buufata bishaanii hojiin deebisaanii dhaabuu raawwatameef:						
Ganda:	-					
<ul><li>I3. Eenyutu deebisee dhaabee:</li></ul>						

# d. Key Informant Interview with Woreda/Kebele Health Office (Afan Oromo)

# Waajjira Fayyaa Aanaa/Gandaa irraa nama adda durummaan ragaa kennu waliin Gaaffii fi deebii Taasifamu

Dakka gailli li ue	ebii.	
Maqaa/wwan:		Gita/toota
	Dhiira/Dubartii	
Maqaa/wwan:		Gita/toota
	Dhiira/Dubartii	
Maqaa/wwan::		Gita/toota
hojii	Dhiira/Dubartii	
Guyyaa gaaffii fi deebiin itti taasif		Yeroo gaaffii fi
Maqaa nama gaa yaadannoo qaba	uffii fi deebii taasisuu tuu	Maqaa nama

Palde zaffi fi dashii.

# Hanga qabiyyee qorrannoowan bishaanii darbuu hin qabnnee:

- Qabiiyye kalifoormii boolii, bakteeriyaa boolii dhukkuba fida ykn ikolaayii Liitira 100 keessattii 0 kan hin caalle
- Qabiyyee Arsenikii:
   Biliyoona keessaa ppoorttii
   10 kan hin caalle ykn 0.01 mg/li
- Qabiyyeee filoraayidii: 0.5 mg/li kan hin caalle

# GAAFFII FI DEEBII OSOO HIN JALQABIN DURA IBSA WALIIGALTEE ITTIIN GAAFATAN DUBBISTANII KANNEEN RAGAA KENNAN HUNDA IRRAA WALIIGALTEE ARGACHUU QABDU

- I. Waajjirri fayyaa Aanaa/ganda kana keessatti dhiheessii bishaanii waliin gahuuf iskiimota kaa'amanii fi hojiirra oolan gama deeggaruutiin shoora attamii baha? [deebii bilisaan]
  - CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Waajjirri kun bishaan jiraachuu isaa fi qulqullina bishaanii to'achuuf ittigaafatamummaa attamii qaba?
- 2. Dhiheessii bishaanii waliin gahuuf iskiimota/buufatalee bishaanii taa'anii fi hojjetaman koreewwan bishaanii, qulqullina naannoo fi kan dhuunfaa bulchan waliin hariiroo ni taasiftuu? Haalawwan attamiitiin?
- 3. Buufataalee bishaanii isaan kam akka qorataman ibsaa. Qorannoowwaniin maal akka madaalaman dabalaatii ibsaa, [deebii bilisa ta'e]
- 4. Qulqullinni tokkoon tokkoon buufta bishaanii yeroo hamamiitti keessatti qoratama?
  - Yoo xiqqaate waggaatti yeroo 12.
  - Yeroo 12 gad ta'ee, yoo xiqqaate waggaatti yeroo 4 ni qoratama
  - Yeroo 4 gad ta'ee, yoo xiqqaate waggaatti yeroo 1 ni qoratama
  - Waggaatti yeroo tokko.
  - Waggaatti yeroo tokkoo gad

- Qulqullinni isaa hin qoratamu.
- 5. Keemikaalotaa fi lubbu qabeeyyii dhukkubaaf ka'umsa ta'ani irratti bu'aan qorannoo qulqullinaa madda bishaanii sadarkaa biyyoolessaa ol ta'e maal ta'a? [Deebii bilisaan]
  - CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Rakkoo hiikuudhaaf eenyutu ittigaafatamummaa qaba?
  - CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Rakkoon hamam irra dedeebi'amee furameera? Saffisa attamiitiin?
- 6. Waajjirri kun dhiheessii bishaanii waliin gahuuf iskiimota ka'amanii fi hojiirra oolaniif yeroo deeggarsa kennutti hudhaawwan isa quunnaman maalfaadha? [Deebii bilisaan]
- 7. Waajjirri keessan muuxannoowwan bishaanii, qulqullina naannoo fi dhuunfaa naannoo Kanaa beeksisuu fi gabbisuuf shoorawwan kan biroon inni bahu yoo jiraatan maalfaadha? [Deebii bilisaan]

Kan irratti dudubbachuu barbaaddan waa'ee tokkoon tokkoon iskiimii dhiheessii bishaanii fi buufata bishaanii Walta'iinsi Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) adda baafadhaa. Bara 2001 irraa eegalee tokkoon tokkoon iskiimii dhiheessii bishaanii fi buufata bishaanii irratti qorannoon qulqullina bishaanii galmaa'e yoo jiraate gaafadhaa.

8.	Buufataalee b	bishaanii	Walta'iinsi	Bishaanii	Itoophiyaa	Jaarraa	Kanaa	(MWA-EP)	kunneeniif
	qorannoowwa	an qulqul	lina bishaani	i Kanaan	dura taasifan	nanii fi g	galmaa'ani	i taa'an yoc	qabaattan
	nati agarsiisuu	ı ni dande	essuu? Eeyy	een/Lakki					

9.	Maqaa buufata/iddoo	bishaanii Walta'iinsi Bishaanii Itoophiyaa Jaarraa	Kanaa
	(MWA-EP)		

NAMA GAAFFII FI DEEBII TAASISU: Qorannoon qulqullina bishaanii galmaa'ee kan qabame yoo ta'e, madaallii sadarkaa biyyooleessaa kan caalu bu'aan qorannoo yoo jiraate galmmeessaa qabadhaa (saanduqa ilaalaa).

١.	Waggaa/ji'a	_Wanta qoratame	Bu'aa	
rop	annochaa			
2.	Waggaa/ji'a	_Wanta qoratame	Bu'aa	
qorannochaa				
3.	Waggaa/ji'a	_Wanta qoratame	Bu'aa	
qorannochaa				
4.	Waggaa/ji'a	_Wanta qoratame	Bu'aa	
qorannochaa				
5.	Waggaa/ji'a	_Wanta qoratame	Bu'aa	
qorannochaa				
6.	Waggaa/ji'a	_Wanta qoratame	Bu'aa	
qorannochaa				

qorannochaa 8. Waggaa/ji'a qorannochaa 9. Waggaa/ji'a qorannochaa	Wanta qoratame	
qorannochaa 9. Waggaa/ji'a	vvanta qoratame	Dužas
9. Waggaa/ji'a		Bu'aa
	Wanta goratame	Ru'aa
qorannoenaa	vvanta qoratame	Bu aa
NAMA GAAFEII EI DEERII TA	A SISI I:Yoo danda'ama suura	a kaasaa.Ragaan qorannoo qulqullina
		namii keessatti akka qoratamee ibsaa
(fkn kan ji'aa,kan waggaa):	aa ee akka argamu, yeroo nan	mariii Reessacti akka qoratamee ibsaa
(IKII Kali ji aa,Kali Waggaa).		
10. Maqaa buufata/iddoo bisl	haanii Walta'iinsi Bishaani	ii Itoophiyaa Jaarraa Kanaa
(MWA-EP)		
NAMA GAAFFII FI DEEBII TA	ASISU: Qorannoon qulqullina	a bishaanii galmaa'ee kan qabame yoo
		orannoo yoo jiraate galmmeessaa
qabadhaa (saanduqa ilaalaa)		, ,
l \\\/a====/ii'a	\\/\auto_government	Bu'aa
i. vvaggaa/jia	Wanta qoratame	BII 22
qorannochaa	Wanta goratame	
qorannochaa 2. Waggaa/ji'a	Wanta qoratame	
qorannochaa 2. Waggaa/ji'a qorannochaa		Bu'aa
qorannochaa 2. Waggaa/ji'a qorannochaa 3. Waggaa/ji'a		Bu'aa
qorannochaa 2. Waggaa/ji'a qorannochaa 3. Waggaa/ji'a qorannochaa	Wanta qoratame	Bu'aa Bu'aa
qorannochaa 2. Waggaa/ji'a qorannochaa 3. Waggaa/ji'a qorannochaa 4. Waggaa/ji'a	Wanta qoratame	Bu'aa Bu'aa
qorannochaa2. Waggaa/ji'a3. Waggaa/ji'aqorannochaa4. Waggaa/ji'aqorannochaa	Wanta qoratame	Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame	Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame Wanta qoratame Wanta qoratame	Bu'aa Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame Wanta qoratame Wanta qoratame	Bu'aa Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame Wanta qoratame Wanta qoratame Wanta qoratame	Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame Wanta qoratame Wanta qoratame Wanta qoratame	Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame	Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame	Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa
qorannochaa	Wanta qoratame Wanta qoratame Wanta qoratame  Wanta qoratame  Wanta qoratame  Wanta qoratame	Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa Bu'aa

NAMA GAAFFII FI DEEBII TAASISU: Yoo danda'ame suuraa kaasaa.Ragaan qorannoo qulqullina bishaanii waggoota kamii galmaa'ee akka argamu, yeroo hamamii keessatti akka qoratamee ibsaa (fkn kan ji'aa,kan waggaa):

daallii sadarkaa b qa ilaalaa). ggaa/ji'a nnnochaa ggaa/ji'a ggaa/ji'a_ nnnochaa_	iyyooleessaa kan caalu bu'aan qoranrWanta qoratame Wanta qoratame	
annochaaggaa/ji'a annochaaggaa/ji'a annochaa	Wanta qoratame	
annochaaggaa/ji'a annochaaggaa/ji'a annochaa	Wanta qoratame	
annochaa ggaa/ji'aannochaa		Bu'aa
ggaa/ji'a nnochaa		
nnochaa	VVanta doratame	D :
ggaa/ii'a		Bu'aa
	 Wanta qoratame	Bu'22
annochaa		Du aa
ggaa/ii'a	Wanta qoratame	Bu'aa
annochaa		
ggaa/ji'a	Wanta qoratame	Bu'aa
annochaa		
		Bu'aa
annochaa	<del></del>	
		Bu'aa
annochaa		D. 2
	•	Bu aa
gaaffii fi de	EBII TAASISU: Yoo danda'ame suur	
kan waggaa):	6	(
	innochaa ggaa/ji'a innochaa ggaa/ji'a innochaa igaa/ji'a innochaa GAAFFII FI DE waggoota kami	innochaaWanta qoratame igaa/ji'aWanta qoratame igaa/ji'aWanta qoratame igaa/ji'aWanta qoratame igaa/ji'aWanta qoratame igaa/ji'aWanta qoratame innochaa GAAFFII FI DEEBII TAASISU: Yoo danda'ame suur

NAMA GAAFFII FI DEEBII TAASISU: Qorannoon qulqullina bishaanii galmaa'ee kan qabame yoo ta'e, madaallii sadarkaa biyyooleessaa kan caalu bu'aan qorannoo yoo jiraate galmmeessaa qabadhaa (saanduqa ilaalaa).

		Wanta qoratame	Bu'aa
_	qorannochaa		
2.		Wanta qoratame	Bu'aa
_	qorannochaa		D 1
3.		Wanta qoratame	Bu'aa
1	qorannochaa	 Wanta qoratame	Bu'aa
r.			bu aa
	qorannochaa	 Wanta qoratame	Bu'aa
٠.	qorannochaa		Bu da
	Waggaa/ii'a	Wanta qoratame	Bu'aa
•	qorannochaa		Bu aa
	Waggaa/ii'a	Wanta qoratame	Bu'aa
•	qorannochaa	vvanta qoratame	Bu aa
1.	Waggaa/ii'a	Wanta qoratame	Bu'aa
•	qorannochaa		
	Waggaa/ii'a	Wanta qoratame	Bu'aa
	qorannochaa_		
-	1aqaa buufata/iddoo	bishaanii Walta'iinsi bishaanii Itooph	niyaa Jaarraa Kanaa (MWA-EP)
_ NA a'∈	1aqaa buufata/iddoo AMA GAAFFII FI DEI	bishaanii Walta'iinsi bishaanii Itooph ———————————————————————————————————	
NA a'e	MA GAAFFII FI DE , madaallii sadarkaa b anduqa ilaalaa).	bishaanii Walta'iinsi bishaanii Itooph BII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qoranr Wanta qoratame	niyaa Jaarraa Kanaa (MWA-EP) a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadha
NA a'e	Maqaa buufata/iddoo AMA GAAFFII FI DE e, madaallii sadarkaa b anduqa ilaalaa). Waggaa/ji'a qorannochaa_	bishaanii Walta'iinsi bishaanii Itooph BII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qoranr Wanta qoratame	niyaa Jaarraa Kanaa (MWA-EP) a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadha Bu'aa
- a'e sa	MAA GAAFFII FI DEI e, madaallii sadarkaa b anduqa ilaalaa). Waggaa/ji'a qorannochaa_ Waggaa/ji'a_	bishaanii Walta'iinsi bishaanii Itooph  EBII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qoranr Wanta qoratameWanta qoratame	niyaa Jaarraa Kanaa (MWA-EP) a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadha Bu'aa
a'e	MAA GAAFFII FI DE e, madaallii sadarkaa b anduqa ilaalaa). Waggaa/ji'a_ qorannochaa_ Waggaa/ji'a_ qorannochaa_	bishaanii Walta'iinsi bishaanii Itooph BII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qoranr Wanta qoratame	niyaa Jaarraa Kanaa (MWA-EP) a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadhaBu'aaBu'aa
a'e sa	MA GAAFII FI DEle, madaallii sadarkaa banduqa ilaalaa).  Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a	bishaanii Walta'iinsi bishaanii Itooph  EBII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qoranr Wanta qoratameWanta qoratame	niyaa Jaarraa Kanaa (MWA-EP) a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadhaBu'aaBu'aa
a'e sa	MAA GAAFFII FI DEI e, madaallii sadarkaa banduqa ilaalaa).  Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa	bishaanii Walta'iinsi bishaanii Itooph  EBII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qoranr Wanta qoratameWanta qoratameWanta qoratame	niyaa Jaarraa Kanaa (MWA-EP) a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadha Bu'aa Bu'aa Bu'aa
a'e sa	Maqaa buufata/iddoo  AMA GAAFFII FI DEI e, madaallii sadarkaa banduqa ilaalaa).  Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a	bishaanii Walta'iinsi bishaanii Itooph  EBII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qorann  Wanta qoratame  Wanta qoratame  Wanta qoratame  Wanta qoratame	niyaa Jaarraa Kanaa (MWA-EP) a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadha Bu'aa Bu'aa Bu'aa
\/\text{A'}\care \( \text{sa} \).	MAA GAAFFII FI DEI e, madaallii sadarkaa banduqa ilaalaa).  Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa	bishaanii Walta'iinsi bishaanii Itooph  EBII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qoranr  Wanta qoratame  Wanta qoratame  Wanta qoratame  Wanta qoratame	niyaa Jaarraa Kanaa (MWA-EP)  a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadhaBu'aaBu'aaBu'aaBu'aa
 ta'e (sa I. 2.	MAA GAAFFII FI DEI e, madaallii sadarkaa banduqa ilaalaa).  Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa Waggaa/ji'a qorannochaa	bishaanii Walta'iinsi bishaanii Itooph  EBII TAASISU: Qorannoon qulqullin iyyooleessaa kan caalu bu'aan qorann  Wanta qoratame  Wanta qoratame  Wanta qoratame  Wanta qoratame  Wanta qoratame	niyaa Jaarraa Kanaa (MWA-EP)  a bishaanii galmaa'ee kan qabame yo noo yoo jiraate galmmeessaa qabadhaBu'aaBu'aaBu'aaBu'aa

6.		Wanta qoratame		_Bu'aa			
7.	qorannochaa Waggaa/ji'a	_Wanta qoratame		_Bu'aa			
8.	qorannochaa Waggaa/ji'a qorannochaa	_Wanta qoratame <sub>_</sub>		_Bu'aa			
9.	Waggaa/ji'a_ qorannochaa_	_Wanta qoratame		_Bu'aa			
bis	NAMA GAAFFII FI DEEBII TAASISU: Yoo danda'ame suuraa kaasaa.Ragaan qorannoo qulqullina bishaanii waggoota kamii galmaa'ee akka argamu, yeroo hamamii keessatti akka qoratamee ibsaa (fkn kan ji'aa,kan waggaa):						
_							

## e. Key Informant Interview - MWA-EP Implementer (Afan Oromo)

## Qaamolee Walta'iinsi bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) waliin Gaaffii fi deebii- taasifamu

Qaamolee Deeggartoota Raa	iwwii Walta'iinsa Bishaanii Guyyaa gaaffii fi
deebii	
Itoophiyaa Jaarraa Kanaa (1	MWA-EP)
Aanaa	Yeroo gaaffii fi
deebii	
Ganda	Maqaa nama gaaffii fi
deebii	
Gooxii	
taasisuu	
	Maqaa nama yaadannoo
	qabatuu
Maqaa	Lakk.bilbilaa
Dhi/Dub	
Maqaa	Lakk.bilbilaa
Dhi/Dub	
Maqaa	Lakk.bilbilaa
Dhi/Dub	

# GAAFFII FI DEEBII OSOO HIN JALQABIN DURA IBSA WALIIGALTEE ITTIIN GAAFATAN DUBBISTANII KANNEEN RAGAA KENNAN HUNDA IRRAA WALIIGALTEE ARGACHUU QABDU

- Bara 1996 hanga 2001tti kan raawatame sagantaa Walta'iinsi Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) keessatti haalli hirmaannaa keessanii maal ture?
  - a. Yeroo amma Walta'iinsi Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) waliin hariiroo yoo qabaatan haalli hariiroo keessanii maalinni?
- 2. Dhaabbanni keessan Walta'iinsi Bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) tiif hojiiwwwan bishaanii, qulqullina naannoo fi dhuunfaa attamii hojjetee xumuree jiraa?
- 3. Dhaabbanni keessan hawaasaa hojiiwwan dhiheessii bishaani biratti raawwatuu fi haala adeemsa raawwii isaa filachuuf tooftaa attamii fayydamee? Dhimmoota lamaan kana adeemsa filachuuf keessatti eenyutu hirmaate?
- 4. Akka ilaalcha keessaniitti, pirojektii hojiiwwan Walta'iinsi bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) yeroo xumurametti, hojiiwwan hojete keessaa kan bishaanii, qulqullina naannoo fi dhuunfaa hojiirra oolchuun bu'aawwan argaman caalmaatti milkaawaa akka ta'an keessaa hojiiwwan isaan kamii?maaliif?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Hojiiwwan kunneen akka milka'aan maaltu gumaacha kan taasisan maalfaa isinitti fakkaata?

- b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Hawaasa baayyee milkaa'ee fi akka fakkeenyaatti kaasuu dandeessan jiruu? Ibsaa.
- 5. Hojiiwwan bishaan, qulqullina naannoo fi dhuunfaa ykn kanneen irraa bu'aawwan argaman walittifufiinsa fooyya'e akka qabaatanii/yeroo dheeraaf akka walitti-fufaniif yeroo raawwiitti tarkaanffileen fudhataman yoo jiraatan maalfaadha? Ibsaa ?
  - a. Bu'aawwan kunneen walittifufiinsa akka qabaataniif caalmaatti kan dandeessise maalinni?
  - b. Hudhaawwan gurguddoodha jedhaman maalfaa turan?
- 6. Muuxannoo qabdan irraa ka'uudhaan Itoophiyaa keessatti, walitti-fufiinsa yeroo dheeraa kan qaban bu'uraalee misoomaa kan bishaanii, qulqullina naannoo fi kan dhuunfaa milkeessuuf hudhaawwan quunnaman keessaa tokko tokko isaan kamfaadha?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Erga hojiin bishaanii, qulqullina naannoo fi dhuunfaa xumuramee waggaa tokkoo, lamaa ykn waggaa saddeet booda duubatti deebitanii yeroo ilaaltan dhimmoonni attamitti jijjiiramu?
  - b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Namni gaafatamu yeroo deebii deebisanitti, waa'ee bu'uraalee misoomaa hojjetamanii fi hawaasa irratti jijjiirama amalaa walitti-fufinsa qabu inni fide tutuquu isaanii mirkaneefadhaa/akka dubbatan taasisaa.
- 7. Namoonni qulqullina dhuunfaa eeggachuu irratti jijjiiramni amalaa gaarii fidan walitti fufiinsa akka qabaatu gochuratihoo? Jijjiirama amalaa namoonii fidan kana yeroo dheeraaf walitti-fufiinsa akka qabaatu gochuudhaaf wantoonni gufuu ta'an /hudhaawwan quunnamuu danda'an maalfaadha?
  - a. Erga raawwiin pirojeektii bishaanii qulqullinaa naannoo fi dhuunfaa xumuramee waggaa tokko, lama ykn waggaa sadii booda, gara boodaatti yeroo ilaalttan dhimmoonni haala attamiitiin jijjiiramu?
  - b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU kan gaafataman yeroo deebii deebisanitti, waa'ee wanttoota qulqullina ittiin eeggatanii (fkn.iddoo harka dhiqannaa) ijaaramanii fi jijjiirraa amalaa hawaasa irratti dhufe tutuquu isaaii mirkaneefadhaa/ akka dubbatan taasisaa.
- 8. Isin ykn Dhaabbanni keessan gandoota Walta'iinsi bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) keessatti hojjetaa ture waliin ammayyuu kallattiinis ta'e, al-kallattiin hariiroo ni qabduu? Hariiroo qabdu yoo ta'e hariiroo attamii ykn hordoffii pirojektii attamiitu taasifamaa jira?
  - a. Gaaffii hordofffii: Erga pirojektiin xumuramee waggaa 8 as gandoota kana keessatti bishaan, qulqullina naannoo fi kan dhuunfaa, akkasumas jijjiiramoota kanneen biroo waliin wal-qabatee qabatamaadhaan wanti uumame isin beektan ni jiraa? Yoo jiraate maalinni?
- 9. Gandootuma kana keessatti, waggoottan sadan darbanitti, sagantaaleen haarawaan dhaabbilee gargarsaa kanneen biroodhaan raawwataman akka jiran hubannoo qabduu?
- 10. Dhaabbannii keessan Walta'iinsi bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) Muuxannoo fudhachuudhaan yeroo ammaa walitti-fufiinsa yeroo dheeraa fooyya'e fiduuf haala adda ta'een wanti inni raawwatu jiraa? Yoo jiraate, jijjiiramoota jiran tareessaatii ibsaa.Maaliif?
- I I. Waa'ee Walta'iinsi bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) ykn waa'ee dhimmoota waliigalaa kunneenii yaadi isin nuu qooddan kan biraan jiraa?

# f. Key Informant Interview on Household and Shared Community Latrine Use (Afan Oromo)

Manneen finccaanii maatii/sadarkaa abbaa warraatii fi kan hawaasni waliin akka itti-fayyadamu ijaaraman irratti gaaffii fi deebii nama adda durummaan ragaa kennu waliin taasifamu

Qaamolee Deeggartoota Raawwii Wal deebii	Guyyaa gaaffii fi		
Itoophiyaa Jaarraa Kanaa (MWA-EP	Yeroo gaaffii fideebii		
Aanaa		Maqaa nama gaaffii fi deebii taasisuu	
Ganda		Maqaa nama yaadannoo qabatuu	
Gooxii			
Deebii kennaa 1: Maqaa	Saala	Umurii	

# GAAFFII FI DEEBII OSOO HIN JALQABIN DURA IBSA WALIIGALTEE ITTIIN GAAFATAN DUBBISTANII KANNEEN RAGAA KENNAN HUNDA IRRAA WALIIGALTEE ARGACHUU QABDU

Gaafii fi deebii Kanaaf sababa adda durummaan ragaa kennuudhaaf filtamtaniif:

- a. Mana finccaaniitti osoo fayyadamaa jirtanii waan mul'ataniif
- b. Naannoo mana finccaanii dhiheenyaan waan jiraattaniif
- c. Mana ficcaanii waan qabddaniif/manneen finccaanii maatiif hojjetaman

I. Manni/een finccaanii kun yoom ijaarame/ijaaraman?\_\_\_\_\_ hin beeku

### Haalawwan mana finccaanii Kanaa

۷.	tenyuun jaarame/man:niin beeku
3.	Dhaabbatichi ijaarsa mana finccaanii kana erga raawwatee booda, dhaabbata Kanaan ala
	dhaabbanni dhiheessa bishaanii yookiin hojiiwwan qulqullinaa irratti hojjetu isin yookii
	miseensota hawaasa waliin hojjechuuf dhufe jiraa? yoo ta'e yoom raawwatame?dhaabbatichi
	hojiiwwwan attamii raawwate?

4. Hawaasa kana keessatti sadarkaa abbaaa warraatti mana finccaannii hojjechuuf kan baratameedhaa?

### Haala fayyadamtootaa

- 5. Mana ficcaanii kana mana finccaanii kan biroo yookiin bakka kan biraa irraa(fakk. bakkee irratti kan fayyadaman waliin) wal-bira qabdanii yeroo madaalttan hamam irra dedeebitanii ittifayyadamtu?
  - a. Mana finccaanii kana yeroo mara kana itti hinfayydamtan yoo ta'e, finccaaniif ykn boliif jecha eessa deemtu? Maaliif?
- 6. Mana /manneen finccaanii kanatti hamam gammadoodha?maaliif?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Amansiisaa ta'uu isaatiin walqabatee gammadoo ta'uu isaanii gaafadhaa.
  - b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Tajaajila qulqullina qabu kennamuu waliin wal-qabatee gammadoo ta'uu isaanii gaafadhaa.
  - c. GAAFFII AKKA CALMAATTI DUBBATAN TAASISU:Hanga bishaan dhihaatuu waliin walqabatee gammadoo ta'uu isaanii gaafadhaa
  - d. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Qulqulluu fi mijaawaa ta'uu isaatiin wal-qabatee gammadoo ta'uu isaanii gaafadhaa.
- 7. Manni finccaanii kun erga ijaaramee ykn manneen finccaanii kunneen erga ijaaramanii as, namoonni biroon manneen finccaanii mataa isaanii ijaarataniiru?akka ilaalcha keessaniitti malliif ijaaratan ykn hin ijaaramne?

## Harka dhiqannaa

- 8. Bakki harka dhiqannaa kun mana finccaanii kana waliin yeroo tokkotti ijaaramee?
- 9. Namoonni mana finccaanichaa erga fayyadamanii booda, harka isaanii saamuunaa/daaraa fi bishaaniin akka dhiqatan hamam irra dedeebitanii hubatan?
- 10. Yeroo manni finccaanii kun ijaarametti dhaabbatichi harka dhiqannaa amaleeffachuu waliin walqabatee barumsi ykn leenjiin inni kenne jiraa?
- II. Akka ilaalcha keessaniitti,namoonni mana finccaannii erga fayyadamanii booda, yeroo mara maaliif harka isaanii hin dhiqatan? maaliif?

## Mana finccaanichaa haala inni irra jiruun eeganii tursuu, qulqullinaa fi suphaa

- 12. Mana finccaanii yookiin manneen finccaanii kana qulqulleessuuf,haala inni irra jiruun eeganii tursuu fi suphuuf ittigaafatamnni eenyuuf kenname?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Tarii hojiiwwan sadeen kana akka raawwataniif namooti adda addaa ittigaafatamummaan kennameef jiraachuu waan danda'aniif waa'ee tokkoon tokkoon isaaii cimsaatii gaafadhaa.
- 13. Manneen finccaanii kenneeniif haala idileedhaan hangam qulqullinii fi eegumsi taasifamaaf? Kana waliin wal-qabatee rakkoowwan uuman kamiyyuu jiruu? Yoo jiraatan maalfaadha?
- 14. Mana yookiin mannen finccaanii qulqulleessuuf, eeganii tursiisuu fi baasii suphaadhaaf barbaachisan eenyutu kafala?
- 15. Mana finccaanichaa yeroo mara qulqulluu akka ta'uu fi fayyadamtoota haalaan akka tajaajila kennu eeganii tursuu akka hin danda'amne hudhaawwan gurguddoon nama quunnaman maalfaadha? Dhaabbanni tokko rakkoo kana salphisuuf wanti inni raawwachuu danda'u jiraa?

### Manneen finccaanii waliinii qofaaf: Kafalttii

16. Manneen finccaanii kunneen irratti hojiiwwan suphaa raawwachuuf maallaqnni dandeessisu eessaa argama?

- 17. Namoonni mana finccaanii kana fayyadamuuf kafalttii isaan kafalan hunda mee tarreessaa.
  - a. Kafalttii waggaa\_\_\_\_\_
  - b. Yeroodhuma fayyadaman kan kafalan\_\_\_\_\_
  - c. Kafalttii biraan yoo jiraate (ibsaa)
- 18. Kafalttiiwwan walitti qabuuf eenyutu ittigaafatamummaa qaba?
- 19. Kafalttiiwan kunneen haala kamiin walitti qabamu?
- 20. Kafalttiiwwan isaanitti ramadame gonkumaa/yeroo barnaadame keessatti kan hin kafale jiruu?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Namoonni kunneen eenyuudha?
  - b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Kan hin kafalleef maaliif?
- 21. Mana finccaanii kan bulchuuf maalaqnni ta'u maddawwan kanneen biroo maalaqnni dhufu kamiyyuu jiraa?
  - a. Eeyyeen yoo ta'e:ibsaa

# g. Group Interview with Shared Community Latrine Management (Afan Oromo)

Mana finccaanii Hawaasi Waliin Itti fayyadaman Ilaalchisee, Gaggeessitoota isaa waliin Gaaffii fi deebii Gareen Taasifamu

Qaamolee Deeggartoo	ta Raawwii Walta'iinsa Bishaanii	
Bakka addaa		
Itoophiyaa Jaarraa Kan	aa (MWA-EP)	
Guyyaa gaaffii fi deebii		
Aanaa taasisuu	_ Maqaa nama gaaffii fi deebii	
Ganda	Maqaa nama yaadannoo qabatuu	
Gooxii		
<b>Deebii kennaa 1</b> : Maqaa Umurii	Shoora gaggeessummaaa	Dhi/dub
<b>Deebii kennaa 2</b> : Maqaa Umurii	Shoora gaggeessummaaa	Dhi/dub
<b>Deebii kennaa 3</b> : Maqaa Umurii	Shoora gaggeessummaaa_	Dhi/dub
	BII OSOO HIN JALQABIN DURA IBSA WALIIG UBBISTANII KANNEEN RAGAA KENNAN HU WALIIGALTEE ARGACHUU QABDU	
	nccaanii kun yoom ijaarame/ ijaaraman ? Hi	in book
2. Eenyutu ijaare ?_	Hin beeku	
dhaabbanni dhihe	rsa mana finccaanii kana erga raawwatee booda, essa bishaanii yookiin hojiiwwan qulqullinaa irratti aasa waliin hojjechuuf dhufe jiraa? yoo ta'e yoom raa	hojjetu isin yookiin
	ssatti irra caalaan namaa sadarkaa abbaaa warraatti man i mana finccaanii waliinii kunneen   mana fincc	•
gammadoodha?		

### Haala addaa ittifayyadamtootaa

- 6. Manneen finccaanii kanatti eenyutu fayyadama? Maaliif? Namni yookiin gareewwan itti hinfayyadamnne yoo jiraatan? yoo jiraatan maallif itti hin fayyadaman?
- 7. Guyyaa guyyaatti timaamaan nama meeqatu manneen finccanii kanatti fayyadama?

## Harka dhiqannaa

- 8. Iddoon harka dhiqannaa fayyadamtoota mana finccaanii Kanaaf jiraa?yoo hin jiraanne yeroo manneen finccaanii kunneen ijaaraman bakki harka dhiqannaa tureeraa/ yoo ture maaltu irra gahe/maal ta'e?
- 9. Namoonni mana finccaanichaa erga fayyadamanii booda, harka isaanii saamuunaa/daaraa fi bishaaniin akka dhigatan hamam irra dedeebitanii hubatan?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Yeroo mara namoonni yeroo mana finccaanii fayyadamanii bahan, sababoonni harka isaanii hin dhiqanneefiidha jettanii yaadan maalinni?

### Suphaa, bakka jiranitti eeganii tursuu fi qulqullina

- 10. Manneen finccaanii bakka jiranitti eeganii tursuu fi haalli Suphaawwan itti raawwataman attamii?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Ittigaaftamummaan isaa kan eenyuuti?
  - b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Adeemsawwan hojii irra oolan maalfaadha?
- II. Manneen finccaanii kana gama bulchuutiin rakkoowwan/dhimmoonni adda durummaan mudatan maalfaadha? Koreen bishaanichaa rakkoowwan kana attamitti hike?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Irraa caalaa bakawwan harka dhiqannaa kana bakka jiranitti gama eeganii tursuu fi rakkoowwan suphaa waliin walqabatan furuuf yeroo hamamii fudhata?
- 12. Deeggarsi Mootummaan karaa waajjiraalee bishaanii taasisu yoo jiraate deeggarsa attamii taasisa? waajjira bishaanii walliin wal-ta'anii hojjechuun attamii, maala fakkaata?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Hariiroo hojii Kanaa keessatti wanti milkaa'aa ta'e maalinni?
  - b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU: Hariiroo hojii Kanaa keessatti rakkoowwan/hudhaawwan attamiitu isin quunname?
- 13. Iddoowwan harka dhiqannaa haala jiraaniin eeganii tursuu fi kafalttiin suphaa attamitti kafalama?

## Kafalttiiwwan

14. Qulqullina manneen finccaanii eeganii tursuu fi hojiiwwan suphaa deeggaruuf kaffalttiiwwan walitti qabaman yoo jiraatan maalfaadha? [Deebii bilisaa] [barbaachisaa yoo ta'e gosawwan kafalttii irratti akka isaan dubbatan yaalii godhaa.

a.	Kafalttii waggaa:
b.	Yeroodhuma fayyadaman kan kafalamu:
C.	Kafalttii biroon yoo jiraate (ibsaa)

- 15. Manneen finccaanii kana bulchuuf ji'atti maallaqa hamamitu baasii ta'a?kun yeroo yerootti hamamiin garaagarummaa qaba?
- 16. Fayyadamtoonni kafalttiiwwan akka kafalan isaan irraa eegaman dhugumatti sadarkaa kamiin kafalamu? fayyadamtoonni kafalttii kafalan yeroo hamamii keessatti deebisanii argatu? (Hojimaati kun ni beekama yoo ta'e)?
- 17. Kafalttiin fayyadamtoota irraa walitti qabamu sadarkaa hamamiitiin baasiiwwan danda'a?
  - a. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU Kafalttiiwwan walitti qabaman baasiiwwan kamiin guutuu dandeessuu?
  - b. CAALMAATTI BAASANII AKKA HIMAN GAAFACHUU Maallaqinni walitti qabame kun gahaa yoo hin taane, kafalttiiwwan walitti qabamaniin baasiiwwan guutamuu hin dandeenye isaan kamfaadha?

# h. Group Interview with Two to Three WASHCO Members (Afan Oromo)

Miseenssota Koree Bishaanii, Qulqullina Naannoo fi Dhuunfaa Lamaa hanga Sadii Ta'an Waliin Gaaffii fi deebii Taasifamu

Maqaa bakka/iskiimii dhihe	essa bish	aanii		
Raawwataa Walta'iinsa Bi	shaanii Ito	oophiyaa	Bakka addaa	
Jaarraa Kanaa (MWA-EP)	Bakki /is	skiimiin	dhiheessii bishaanii kan i	ttiin
	bulu			
Aanaa		K	anneen gaaffii fi deebii ir	ratti hirmaatan
Ganda			gidduudhaa lakk.bil	bilaaa nama
Gooxii		_	tokkoo	
Deebii kennaa I: Maqaa_				
keessatti Umurii		isaan	qaban	dhiira/dubartii
Deebii kennaa 2: Maqaa_			koree bisaanii,qulqullin	
Umurii		ISAAII	чарап	dillira/dubarti
Deebii kennaa 3: Maqaa				
keessatti Umurii		isaan	qaban	dhiira/dubarti
			ABIN DURA IBSA WAL	
			EEN RAGAA KENNAN I NRGACHUU QABDU	HUNDA IRRAA
Haala buufata bishaanii				
			anii kun yoom ijaarame?	Hinbeeku
2. Buufata bishaanii kana	Eenyyutu ij	jaarame?_	ooda haala cimaa ta'en hojii	Hinbeeku
			Eeyyeen/Lakki/ Hinbeeku	ii deedisaaliii

	4. 5.	Hojiii deebisaanii dhaabuu/haaromsuu kan hojjete eenyuudha? Hinbeeku Kun kan ta'e yoomii? Hinbeeku
	6.	Erga iskiimiin/bakki dhiheessa bishaanii kun ijaaramee booda,dhaabbata Kanaan ala kan ta'e, buufata bishaanii kana fooyyessuuf yookiin hawaasa Kanaaf dhiheessii bishaanii fi qulqullinaa hojjechuf iskiimiin dhiheessa bishaanii kan biraan dhufe jiraa? Yoo jiraate, yoom raawwatame? Hojiiwwan raawwataman maalfaadha?
	7.	Hawaasni buufata bishaanii kanatti hamam gammadaadha jettanii yaaddu? [Deebii bilisaan]
Haa	ala	ittifayyadamtootaa
	8.	Buufata bishaanii kanatti abbootii warraa meeqatu itti fayyadama? (yoo hin qulqulleeffanne tilmaamaan dubadhaa):
	9.	Namoonni bishaan isaanii guuttatanii fudhachuuf hiriira irratti yeroo hamamii itti fudhata?
Har	ma	bishaaanii
	۱0.	Yoo kan beekamu ta'e, buufata bishaanii Kanaan haala barameen daqiiqaatti bishaan liitira meeqtu gad-bu'a?hin beeku
	11.	Waliigalaatti, hangi bishaanii buufata bishaanii kana irraa argamu waggaa guutuudhaaf gahaadhaa? Yoo hin taane namoonni maal godhu?
Qul	lqu	llina bishaanii

- 12. Bishaan buufata kana irraa argamu dhugaatiif amansiisaadha jettanii amantuu? Maaliif?
- 13. Qulqullinni bishaanii buufata bishaanii Kanaa kan madaalamu yoo ta'e, yeroo hamamiitti madaalama?
  - a. Yoo xiqqaate waggaatti yeroo 12
  - b. Yeroo 12 gad ta'ee, waggaattii yoo xiqqaate yeroo 4 ni madaalama.
  - c. Yeroo 4 gad ta'ee, waggaatti yoo xiqqaate yeroo tokko ni madaalama.
  - d. Waggaatti yeroo tokko
  - e. Waggaatti yeroo tokkoo gad
  - f. Ququllinni isaa hin madaalamu.
- 14. Yoo qorannoon qulqullina bishaanichaa baay'ina keemikaalota bishaanicha keessa jiraachuu qabanii ol agarsiise (fkn baakteeriyaa boolii, filooraayidii baayinni isaa ol'ka'e, summii, kkf) maal godhama/maaltu uumama?
- 15. Ragaa qorannoo qulqullina bishaanii Kanaan duraa taasifamee galmaa'ee ni taa'aa? Ragaan kun galmaa'ee qabamee kan jiru yoo ta'ee ilaaluu nan danda'aa? Eeyyeen/Lakki (NAMA GAAFFII GAAFATU):Yoo dandeessan suuraa kaasaa ykn footoo koppii kaafadhaatii qabadhaa.. Ragaan baroota kamii galmaa'ee akka jiru ibsaa. Qorannoo bishaanii Kanaan wanttooti attamii akka qorataman, qorannochi garaagarumma yeroo hamamii keessatti akka raawwatame (fkn.ji'a ji'aan, waggaa waggaan) kkf ibsaa.

Yaaliiwwan bishaanii kanneen asiin gaditti ta'an caaluu hin qaban :

- Raammoo Boolii (Fecal coliforms, fecal streptococci, or E. coli): ml 100 keessatti 0 kan hin caalle
- Summii (Arsenic) Liitira 1keessatti mg 0.01 kan hin caalle
- Filooraayidii (Fluoride): Liitira 1 keessatti mg 0.5 kan hin caalle
- a. Ragaan galmaa'e yoo jiraate:NAMNNI GAAFFII GAAFATU: Firiin qorannochaa wanttoota keemikaalaa bishaan keessatti argaman sadarkaa biyyoolessaa fudhatama qabuu ol darbeera yoo ta'e, yaadannoo qabadhaa( Sadarkaa qorannoo biyyoolessaa saanduqa keessatti ilaalaa)

i.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
ii.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
iii.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
i٧.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
٧.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
٧i.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
vii.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
/iii.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		
ix.	Waggaa/ji'a	Wanta qoratame	_dubbifama/bu'aa
	qorannoo		

## Buufata bishaanichaa bakka jirutti eeganii tursuu fi Suphaa

- 16. Buufati bishaanii tajaajila kennaa/ hojjechaa jiraachuu isaa hordofuuf eenyutu ittigaafatamummaa qaba? Shoorri waajjirri bishaanii bahu jiraa? yoo jiraate shoorri isaa maalinni?
- 17. Yeroo hamamiitti suphaa taasisuuf barbaachisa? Rakkoowan irra dedeebi'anii uumaman maalfaadha?
- 18. Buufati bishaanii kun yeroo hunda tajaajila kennaa/ hojjechaa jiraachuuf mirkaneefachuuf hudhaawwan adda durummaan gufuu ta'an maalfaadha?

#### Kafalttiiwwan

19. Kafalttii koree bishaanii, qulqullina naannoo fi kan qulqullina dhuunfaatiif kan oolan maddawwan maallaqaa maaltu jiruu? Madden adda addaa irraa maallaqa hangamitu argameera?20. Yoo tajaajila bishaanii argachuuf kafalttiiwwan jiraatan ibsaa.

a.	Kafalttii waggaa:	
b.	Yeroodhuma fayyadaman kafalttii kafalamu:	kuusaa liitira 10
	qabatu/kuusaa liitira 20qabatu/kan biroof yoo	jiraate (barreessaa):
c.	Kafalttii biroon yoo jiraate (ibsaa)	· · · · · · · · · · · · · · · · · · ·

- 21. Fayyadamttoonni kafalttii isaan irraa eegamu dhugumaanitti sadarkaa hamiin kafalu? Hojimaati kun kan beekamu yoo ta'e, tajajaajila bishaaniirra kafalttii akka sasaabamu eegamu keessaa meeqatu sasaabama?
- 22. Maallaqanni tajaajila bishaanii kana irraa sasaabamu buufata bishaanii kana eeganii tursuu fi suphaadhaaf baasiiwwan barbaachisan sadarkaa hamamiitti danda'a? kan hin dandeenye yoo ta'e, qaawwaan isaa hamam guddadha? Qaawwaa maallaqaa kanas attamitti guuttu?
- 23. Kafalttiiwwan kana galmeessitanii ni qabattuu? ilaaluu ni danenyaa?

## Jijjiiramoota ilaaltan

- 24. Iskiimiin dhiheessii bishaanii/ buufati kun erga ijaaramee as koreen bishaanii, qulqullina naannoo fi kan dhuunfaa dhiheessi bishaani/buufaticha tooftaan inni itti bulchu waggoota muraasa darban keessatti hamam jijjiirameera? Attamitti jijjiirame? Jijjiiramnni taasifame waan fooyya'adhaaf moo rakkoo caaluuf?
- 25. Kanaafuu, buufata bishaanii yookiin waa'ee dhaabbata ijaaree wanti anaa wajjin mari'achuu barbaadan ni jiraa?

## i. Structured Group Interview with One or Two Water Collectors (Afan Oromo)

## Fayyadamtoota Buufataalee Bishaanii Kanneen Bishaan Waraabbatan Tokko ykn Lamaa Ta'an Waliin Gaaffii fi deebii Qindaa'aa Taasifamu

Dhiheessii bishaanii wa	aliin gahuuf kan diriirifi			
Maqaa Iskiimii/ pirooje	ektii bishaanii			
Ganda				
Maqaa bakka buufata	bishaanii			
Gooxii				
Raawwataa walta'iinsa	bishaanii Itoophiyaa			
Jaarraa Kanaa (MWA-	EP)	Bakka addaa Iskiimiin bishaanii/ dhiheessiin		
Aanaa				
			bishaanii k	un kan gaggeeffamu
Deebii kennaa	Saala	Umurii		Waggaa as jiraatan
				lakkoofsaan
Nama gaaffii fi deebii				
irratti hirmaatu lakk l				
Nama gaaffii fi deebii				
irratti hirmaatu lakk 2				

# GAAFFII FI DEEBII OSOO HIN JALQABIN DURA IBSA WALIIGALTEE ITTIIN GAAFATAN DUBBISTANII KANNEEN RAGAA KENNAN HUNDA IRRAA WALIIGALTEE ARGACHUU QABDU

### Haala ittifayyadamaa

- I. Buufata bishaanii kana hamam dhuftu?
- 2. Buufata bishaanii kana yeroo dhutanitti bishaan waraabatanii deemuuf dabareef yeroo hamamii isinitti fudhata?
- 3. Fedhii fi fayyadama bishaanii maatii keessanii guyya guyyaa guutuuf jecha bishaan dabalataaf jecha madda bishaanii kamirraa kamiraayyuu bishaan waraabbattanii beektuu?

  Deebiin isaa eeyyeen yoo ta'e, maaliif, akkasumas bishaan dabalataa kana eessa waraabbattu?
- 4. Buufata bishaanii kana irraa bishaanni waraabbattan fedhii fi fayyadama bishaannii guyyaa guyyaa qabdan ni guutaa/gahaadhaa?
  - a. Waggaa guutuu hama bishaanii wal-fakkaatu ni argattuu? Yookiis yeroodhaa gara yerootti hama bishaanii gara garaa arggattuu?
- 5. Bishaan kana tajaajila maaliitiif ittifayyadamtu?

- 6. Bishaan kun dhugaatiif ni ta'aa/ qulqullinni isaa kan eegame ta'ee isinitti dhagahamaa? Maaliif isinitti fakkaata? maaliif isinitti hin fakkaatu?
- 7. Namni miseensa hawaasa Kanaa ta'e hundi buufata bishaanii kana wal-qixa itti-fayyadamuu ni danda'aa? Maaliif?
- 8. Namoonni buufata bishaanii kanatti fayyadamuu hin dandeenye isaan kamiidha? Maaliif?
  - a. Namonni qabeenya qaban, saala murtaa'ee fi kutaawwan hawaasaa qaama miidhamtoota ta'an buufta bishaanii kanatti kan hin fayyadamne yoo ta'e baasanii akka isinitti himan taasisaa.

#### Haala Bulchiinsa isaa

- 9. Buufata bishaanii kana eenuytu bulchaa?
- 10. Buufati bishaanii kun hamam haala gaariidhaan bulaa jira jettanii yaadduu? Maaliif?
  - a. Wanti bulchiinsi bishaanii haala gaariidhaan raawwachaa jiran maalinni?
  - b. Haala adda ta'een/karaa biraatin wanti isaan raawwachuu qabdan maalinni?
- II. Buufati bishaanii kun gama tajaajila kennuutiin wal qabatee rakkoowwan quunnamanii beekuu? Yoo ta'e rakkoo attamiitu quunnamanii beeku? rakkoowwan kunneen attamitti hiikaman? Rakkoowwan kunneen eenyuun hiikaman?
- 12. Buufati bishaanii yeroo tajaajila dhaabetti maal gootan?
- 13. Adeemsa yeroo keessatti haalli buufati bishaanii bule/itti suphame ilaalchisee, jijjiiramota attamii ilaaltan?

### Madda maallagaa

- 14. Buufata Bishaanii kanatti fayyadamuuf/waraabbachuuf qarshii meeqa kafaltu? kafaltiin kun isinii fi matiin keessan kan kafaluu dandeessan/dandeettii kafaluu keessan waliin kan wal-madaaluudhaa?
- 15. Namoonni hundi tajaajila bishaanii argachuuf/ waraabbachuuf kafalttiin kafalan kan wal-fakkaatuudhaa? Yoo hin taane maaliif?
- 16. Tajaajila bishaaniitiif kafalttiin kafalamu waggoota 8 darban keessatti jijjiiramee kan beeku yoo ta'e, attamitti jijjiirame?

Waa'ee buufata bishaan Kanaa yookiin buufati bishaanii attamitti akka bulu wanti nati himuu barbaaddan jiraa?

## 6. Structured Observation Forms (Afan Oromo)

## a. Structured Observations at Water Points (Afan Oromo)

## Buufataalee Bishaanii Irratti Do'iiwwan Qindaa'aa Taasifaman

Dhihee	essii bishaanii waliin gahuuf kan hojiirra oo	ole	
Maqaa	Iskiimii/piroojektii bishaanii	Bakka addaa	
Raaww	vataa walta'iinsa bishaanii Itoophiyaa	Bakka sanatti maqaa nama	
Jaarraa	a Kanaa (MWA-EP)	dubbisuu dandeenyeu	
		Bakka sanatti lakk.bilbilaa nama	
<b>G</b> anda		dubbisuu dandeenyeuu	
Gooxii		Maddi/ Piroojektiin bishaanii kun kan gaggeeffamu	
		Gosa Iskiimii/dhiheessii	
buufatal Buufataa qaamole	lee bishaanii ijaaramanii	n yookiin dhiheessii bishaanii Kanaan baay'ina yoo ta'e, tokkoon tokkoon buufatalee bishaanii bishaanii irraa adda ta'e/ta'an)	
Do'ii b	akka buufata bishaanii I <sup>ffaa</sup> irratti taasifar	nan	
1.	Namoota meegatu bakka buufata bishaanitti	dabaree eeggataa jiru?	
2.	Kuusaawwan bishaanii meeqatu bishaan guutt guutamuu beekuuf gosa kuusaa bishaanii adda	achuuf dabaree eegaa jira? (Hama bishaan	
3.	Namoonni buufata bishaanitti walittqabaman saalaann,umuriin)	•	
4.	· · · · · · · · · · · · · · · · · · ·		
5.	Deebiin isaa eeyyee yoo ta'e, bakki ittidhiqata mul'isu jiraa?	ın kunneen faayidaa irra ooluu isaanii wanti	
6.	Bakka loon bishaan itti obaasan jiraa? Eeyyee jiraa?	yoo ta'e: faayidaa irra ooluu isaanii wanti mul'isu	
7.	Yeroo ammaa buufatni bishaanii kun bishaan r		
8.	Gosa paamppii harkaa dhiibamu yoo ta'e, qab	annoon isaa yeroo meega erga dhiibame booda,	

Kuusaa liitira 20 qabatutti bishaan guutaa, kuusaa kana guutuuf yeroo inni fudhatu beekuuf sa'atii/daqiiqaa qabadhaa. Buufata bishaanii gose harkaa dhiibamu yoo ta'e, meeshaa bishaan

itti qabatan kana guutuuf yeroo meeqa qabannoo kun akka dhiibame lakka'aa.

10. Meeshaa Liitira 20 qabatu guutuudhaaf sakandoota inni fudhate

bishaanni bu'u akka jalqabe galmeessaa.\_\_

- 11. Meeshaa Liitira 20 qabatu guutuudhaaf qabannoon kun yeroo meega dhiibame?
- 12. Buufati bishaanii kun rakkoo coccobuu bishaanii sadarkaa hammaataadhaan ifatti mul'atu kan qabu ta'uu isaa yoo argitan, galmeeffadhaa.
- 13. Buufati bishanichaa Suphaa fi haaromsa akka isa barbaachisu ifati kan mul'atu yoo ta'e, galmeeffadhaa.
- 14. Waliigalattii hudhaawwanii fi yaddowwan mul'atan irratti yaada kennaa.

Do'iiwwan buufata bishaanii 2<sup>ffaa</sup> irratti taasifaman (gaaffiiwwan kana hanga buufata bishaanii 4<sup>ffaa</sup>ttii irra deebi'aa)

Do'iiwwan buufata bishaanii 3ffaa irratti taasifaman

Do'iiwwan buufata bishaanii 4ffaa irratti taasifaman

# b. Structured Observations of Household Latrines (Afan Oromo) Do'ii qindaa'aa Manneen Finccaanii Sadarkaa Abbaa warraatti Hojjetaman Irratti Taasifamu

Raawwataa dhiheessii bishaanii hojii walta'	iinsa bishaanii
Itoophiyaa Jaarraa Kanaa (MWA-EP)	Bakka addaa
Aanaa	
Ganda	
Gooxii:	

Manneen finccaanii isaan kamitu deeggarsaa maallaqaa Dhaabbata Gargaarsaa Ameerikaa (USAID) irraa argamuun kan socho'u walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP)keessatti abbootiin warraa hirmaachuu isaaniitiin akka ijaaraman beekuuf, gaggeessitoota hawaasa naannoo ykn hawaasa keessatti kanneen beekumsa qaban waliin hojjechuu. Tokkoon tokkoon mana finccaannii daawwachaa do'iiwwan itti aananii jiran guutaaa.

### Mana finccaanii lakkoofsa 1:

Ι.	Manni finccaanii kun yeroo piroojektiin walta'iinsa bishaanii ltoophiyaa Jaarraa Kanaa (MWA-EP) jirutti abbootii warraatiin kan hojjetameedha?	Eeyyeen / Miti hin beeku
2.	Manni finccaanii kun yoom hojjetame? hin beeku	Bara:  Yoom akka hojjetame hin beeku
		100111 akka 110jjetaine illii beeku
3.	Saalaan kan ramadamee/adda bahe:	Dubartii/Dhiira/saalaan kan adda hin baane(namnni kamiyyuu fayyadamuu kan danda'u)
	3.1 Yoo saalaan adda bahee jiraate: Manni finccaanii saala isa tokkoo, kan saala isaa biraa irraa attamitii adda bahee jiraa (keenyaadhaan ykn walirraa fagaatee ijaaramuu isaa)?	Eeyyeen / Lakki
4.	Gosa mana finccaanii	a) Sadarkaa guddaa kan qabu/haala addaatiin kan qophaa'e
		b) Kan bishaan gad-buusu
		c) Kan aaddaa, mana finccaanii
		boollaa lafti isaa kan miiccamu (Siminttoo)

		<ul> <li>d) Kan aaddaa, mana finccaanii boollaa lafti isaa kan hin miiccamu (lafti isaa biyyoo)</li> <li>e) Boollaa gabaabaa qotame ta'ee golgaa kan qabu</li> <li>f) Kan biroon yoo jiraate ibsaa:</li> </ul>
5.	Waliigalatti manni finccaanichaa lakkoofsaan kutaa meeqa qaba?	Lakkoofsaan :
	5.1 Mana finccaanichaa fayyadamuudhaaf banaadhaa (kan hin cufamin):	Eeyyeen / Miti
	5.2 Mana finccaanii fayyidaa irra ooluu isaa ragaan ifati mul'atu (fooliin yoo qabaate, qaawwaa keessa ilaalaa):	Eeyyeen / Miti
	(10011111 you qabaate, qaawwaa keessa naanaa).	Yaadannoo
	5.3 Manni finccaanii guutumaa guttuutti kan golgame, namnni bilisa ta'ee kan ittifayyadamuu danda'uudhaa? (naannoon isaa keenyaa kan qabuu fi balbala guutumaa guutuutti cufamu kan qaban):	Eeyyeen / Miti
	5.4 Balbballi isaa keessaan kan cufamu	Eeyyeen / Miti
	5.5 Ijarsa amansiisaa ta'e kan qaban(jalli isaa kan amansiisa ta'e, keenyaa fi baaxiin isaa kan hin sochonee fi kan hin buqaane):	Eeyyeen /Miti Yaadannoo
	5.6 Qaama miidhamttoonni salphaatti ittifayyadamuu danda'aniidhaa? (fakk.olka'iinsa kan hinqabnne, keessaan deeggarsaaf waan qabatamu kan qabu, bakka ta'an):	Eeyyeen / Miti
	5.7 Haala qulqullina: Mana finccaanichaa sadarkaa qulqullina fudhatamaa kan qabu (fkn finccaaniin hin faalamnne, boolii ykn waraqaa mana finccaanii fayyidaa irra oole):	Eeyyeen / Miti
	5.8 Foolii: Foolii fudhatamaa kan qabu (kan hin ajoofne ykn foolii xiqqaa dandamachuun danda'amu):	Eeyyeen / Miti Yaadannoo
	5.9 Titisa: Mana finccaanii titisota lakkoofsi isaanii sadii gad / hin caalle kan qabu:	Eeyyeen / Miti
6.	Mana finccaanii keessatti kutaalee kamiyyuu keessatti ykn dhiheenya isaaniitti meeshaalee hudduu haxaa'annaaf/qulqulla'uuf kan tajaajilu kan akka waraqaa ykn bishaan kuusaadhaan jiruu?	Eeyyeen / Lakki
7.	Meeshaalee kana suuraa kaasaa	

8.	Yaadannoo:	

Mana finccaanii lakk. 2<sup>ffaa</sup>: (gaaffiiwwan olitti jiran hanga manneen finccaanii 8<sup>ffaa</sup> tti irra deebi'aa)

Mana finccaanii lakk. 3ffaa:

Mana finccaanii lakk. 4ffaa:

Mana finccaanii lakk. 5ffaa:

Mana finccaanii lakk. 6ffaa:

Mana finccaanii lakk. 7ffaa:

Mana finccaanii lakk. 8ffaa:

## Tajaajilawwan harka dhiqannaa

I. Harka dhiqannaaf akka oolu yaadamee gosa meeshaa kamiiniyyuu dhiheenyatti bishaanni qophaa'e jiraa? guutamaa ta'us, ta'uu baatus?	Eeyyeen/lakki
Meeshaa bishaanii harka dhiqanaaf taa'ee jiru suuraaa kaafadhaa	
3. Meeshaaleen bishaanii harka dhiqanaaf oolan baatee jiru eessa taa'anii jiru? Issa sirrii ta'e hundatti mallattoo geenggoo taasisaa)	a) Mana finccaaniitti dhihoo  b) Kan biroo ibsaa:
4. Har'a meeshaalee bishaanni harka dhiqannaadhaaf oolan kamiiniyyuu keessa bishaanni jiraa?	Eeyyeen/lakk
5. Har'a meeshaalee harka dhiqanaadhaaf qophaa'an irra saammunaan jiraa?	Eeyyeen/lakk
6. Har'a namooti mana finccaaniitti fayyadamanii yeroo bahanitti. harka isaanii dhiqachuu isanii wanti agarsiisu jiraa?(fkn lafti yookiin saamunaan jiidhaa yoo ta'e?	Eeyyeen/lakk

7.	Har'a erga mana finccaaniitti fayyadamanii bahanii booda, namoota harka isaanii osoo dhiqatan agartan jiruu? eeyyeen yoo ta'e saala isaanii ibsaa.	Eeyyeen/lakk
8.	Har'a erga mana finccaaniitti fayyadamanii bahanii booda, namoonni harka isaanii osoo hin dhiqatin agartan jiruu ?eeyyeen yoo ta'e, saala isaanii ibsaa.	**

# c. Structured Observations of Shared Community Latrines (Afan Oromo)

## Do'ii Qindaa'aa Mana finccaanii Hawaasni waliin itti fayyadamu irratti taasifamu

Manneen finccaanii waliinii isaan kamitu deeggarsaa maallaqaa Dhaabbata Gargaarsaa Ameerikaa (USAID) irraa argamuun kan socho'u walta'iinsa bishaanii Itoophiyaa Jaarraa Kanaa (MWA-EP) qaamolee deeggaraniin kan ijaaraman ta'uu isaanii beekuuf, gaggeessitoota hawaasa naannoo ykn hawaasa keessatti kanneen beekumsa qaban waliin hojjechuu. Tokkoon tokkoon mana finccaannii daawwachaa do'iiwwan itti aananii jiran guutaaa.

Raawwata deeggaraa Walta'iinsa bishaanii	
Itoophiyaa Jaarraa Kanaa (MWA-EP):	
Aanaa	
Ganda	
Gooxii	
Bakka addaa	
Guyyaa itti do'atame	_
Yeroo itti do'atame	_
Maqaa nama do'atee	

### Mana finccaanii lakkoofsa 1:

Manni ficcaanii kun piroojektii walta'iinsa bishaanii Itoophiyaa     Jaarraa Kanaa (MWA-EP) dhaan kan hojjetameedha?	Eeyyeen/Miti/hin beeku
2. Manni finccaanii kun yoom hojjetame?	Bara:
	Hin beeku
3. Saalaan kan ramadamee/adda bahe:	Dubartii/Dhiira/saalaan kan adda hin baane(namnni ni kamiyyuu fayyadamuu kan danda'u)
a) Yoo saalaan adda bahee jiraate: Manni finccaanii saala isa tokkoo, kan saala isaa biraa irraa attamitii adda bahee jiraa (keenyaadhaan ykn walirraa fagaatee ijaaramuu isaa )?	Eeyyeen / Miti
4. Gosa mana finccaanii	a) Sadarkaa guddaa kan qabu/haala addaatiin kan qophaa'e
	b) Kan bishaan gad-buusu

			c) Kan aaddaa, mana finccaanii boollaa lafti isaa kan miiccamu (Siminttoo)
			d) Kan aaddaa, mana finccaanii boollaa lafti isaa kan hin miiccamu (lafti isaa biyyoo)
			e) Boollaa gabaabaa qotame ta'ee golgaa kan qabu
			f) Kan biroon yoo jiraate ibsaa:
5.	Wa	aliigalatti manni finccaanichaa lakkoofsaan kutaa meeqa qaba?	Lakkoofsaan :
	a)	Baay'ina kutaalee mana finccaanii fayyadamtootaaf banaa ta'an (kan hin cufamin):	Lakkoofsaan :
	b)	Baay'ina kuataalee mana finccaanii do'attonnni keessa lixuu danda'anii:	Lakkoofsaan :
	c)	Namoonni manneen finccaanii kanattii fayyadamaa jiraachuu isaanii ragaan ifatti mul'isuu kutaalee mana finccaanii Kanaa meeqa keessatti argamu (fooliin yoo jiraate, qaawwaa isaa keessa ilaalaa, namoonni kutaalee kunneenitti fayydamaa jiraachuu isaanii ilaalaa):	Lakkoofsaan :
	d)	namoonni bilisa ta'anii itti fayyadamuu danda'aniidhaa?(keenyaa kana qabanii fi balbaloota guutumaa guutuutti cufamuu danda'an kan qaban )	Lakkoofsaan :
	e)	Baay'ina kutaalee mana finccaanii balbala keessaan cufamu kan qaban:	Lakkoofsaan :
	f)	Baay'ina mana finccaanii ijarsa amansiisaa ta'e kan qaban(jalli isaa kan amansiisa/jabaa ta'e, keenyaa fi baaxiin isaa kan hin sochonee fi kan hin buqaane):	Lakkoofsaan :
	g)	Baay'ina kutaalee mana finccaanii daa'immanii fi qaama miidhamttoonni salphaatti ittifayyadamuu danda'an (fakk.olka'iinsa kan hinqabnne, deeggarsaaf waan qabatamu kan qabu,bakka ta'an kan qabu, qaawwaa mana finccaanii dhiphoo jiraachuu isaanii ):	Lakkoofsaan :
	h)	qulqullina fudhatamaa qabuu kan qaban meeqa? (fkn finccaaniin hin faalamnne, boolii ykn waraqaa mana finccaanii fayyidaa irra oole):	Lakkoofsaan :
	i)	Foolii : Baay'ina kutaalee mana finccaanichaa foolii foolii fudhatamaa kan qabu(kan foolii hinqabne, hama tokko foolii kana qaban, foolii dandamachuun danda'amu kan qaban):	Lakkoofsaan :
	j)	Titisa: Baay'ina kutaalee mana finccaanii lakkoofsi titisotaa muraasini keessatti mul'atanii (0-3):	Lakkoofsaan :

	Mana finccaanii keessatti kutaalee kamiyyuu keessatti ykn dhiheenya isaaniitti meeshaalee hudduu haxaa'annaaf/qulqulla'uuf kan tajaajilu kan akka waraqaa ykn bishaan kuusaadhaan jiruu?	Eeyyeen / Lakki
7.	Har'a manneen finccaanii kanatti namni kamiyyuu osoo ittifayyadamaa jiruu agartaniituu?	/Dhiira  Joollee dubaraa joollee dhiiraa
8.	Suuraa kaasaa	
ii.	Yaadannoo:	

Mana finccaanii lakk 2: (gaaffiiwwan olitti gaafataman hanga bilookii 4ffaa tti irra deebi'aa)

Mana finccaanii lakk 3:

Mana finccaanii lakk 4:

## Tajaajilawwan harka dhiqannaa

iii.	Harka dhiqannaaf akka oolu yaadamee gosa meeshaa kamiiniyyuu dhiheenyatti bishaanni qophaa'e jiraa? guutamaa ta'us, ta'uu baatus?	Eeyyeen/lakki
iv.	Meeshaa bishaanii harka dhiqanaaf taa'ee jiru suuraaa kaafadhaa	
٧.	Meeshaaleen bishaanii harka dhiqanaaf oolan baatee jiru eessa taa'anii jiru? Issa sirrii ta'e hundatti mallattoo geenggoo taasisaa)	a) Mana finccaaniitti dhihoo  b) Kan biroo ibsaa:
vi.	Har'a meeshaalee bishaanni harka dhiqannaadhaaf oolan kamiiniyyuu keessa bishaanni jiraa?	Eeyyeen/lakk
vii.	Har'a meeshaalee harka dhiqanaadhaaf qophaa'an irra saamuunaan jiraa?	Eeyyeen/lakk

viii.	Har'a namooti mana finccaaniitti fayyadamanii yeroo bahanitti, harka isaanii dhiqachuu isanii wanti agarsiisu jiraa? (fkn lafti yookiin saamuunaan jiidhaa yoo ta'e?	Eeyyeen/lakk
ix.	Har'a dubartiin fayyadamtoota mana finccaannii yeroo harka isaanii dhiqatan agartaniituu?	Eeyyeen/lakki
x.	Har'a dhiirri fayyadamtoota mana finccaannii yeroo harka isaanii dhiqatan agartaniituu?	Eeyyeen/lakki

# ANNEX III: DATA COLLECTION SCHEDULE AND PARTIES CONSULTED

Date	Target	Туре	Region	Woreda
11/6/2017	MWA Implementer	Interview	Addis	N/A
11/7/2017	MWA Implementer	Interview	Addis	N/A
	Regional Water Office -			
11/8/2017	SNNP	informal	SNNP	
11/8/2017	Zonal Water Office	Informal	Amhara	
11/9/2017	Woreda Water Office	Interview	SNNP	Kucha
11/9/2017	Woreda Health Office	Interview	SNNP	Kucha
11/9/2017	Water User	Interview	SNNP	Kucha
11/9/2017	Water sample	Water Sample	SNNP	Kucha
		Latrine		
11/9/2017	HH latrine obs	Observation	SNNP	Kucha
11/9/2017	HH latrine owner	Interview	SNNP	Kucha
11/9/2017	Woreda Health Office	Interview	Amhara	Simada
11/10/2017	CHW	Interview	SNNP	Kucha
11/10/2017	WASHCO	Interview	SNNP	Kucha
		Latrine		
11/10/2017	HH latrine obs	Observation	SNNP	Kucha
		Latrine		
11/10/2017		Observation	SNNP	Kucha
11/10/2017	Woreda Water Office	Interview	Amhara	Simada
11/10/2017		Latrine		C: 1
11/10/2017		Observation	Amhara	Simada
11/10/2017		Interview	Amhara	Simada
11/10/2017		Interview	Amhara	Simada
11/10/2017		Interview	Amhara	Simada
11/10/2017		Interview	Amhara	Simada
11/11/2017	Woreda Water Office	Interview	SNNP	Soro
11/11/2017	Woreda Health Office	Interview	SNNP	Soro
11/11/2017	Water Sample	Water Sample	Amhara	Simada
11/11/2017	I II I I a turiu	Latrine	A!	C: I
11/11/2017	HH latrine obs	Observation	Amhara	Simada
11/11/2017	HH latrine obs	Latrine Observation	Amhara	Simada
11/11/2017	HH latrine obs  HH latrine owner		Amnara	Simada
		Interview		
11/11/2017	HH latrine owner	Interview	Amhara	Simada
11/11/2017	WASHCO	Interview	Amhara	Simada
11/11/2017	Water User	Interview	Amhara	Simada
11/13/2017	HH latrine owner	Interview	SNNP	Soro

		Latrine		
11/13/2017	HH latrine obs	Observation	SNNP	Soro
11/13/2017	HI latrille obs	Latrine	SININE	3010
11/13/2017	HH latrine obs	Observation	SNNP	Soro
11/13/2017	nn laurine obs		SININF	3010
11/12/2017	III I lateria a alta	Latrine	CNINID	C
11/13/2017		Observation	SNNP	Soro
11/13/2017	HH latrine owner	Interview	SNNP	Soro
11/13/2017	Water User	Interview	Amhara	Simada
11/13/2017	HH latrine owner	Interview	Amhara	Simada
11/13/2017	WASHCO	Interview	Amhara	Simada
11/13/2017	Water Sample	Water Sample	Amhara	Simada
		Latrine		
11/13/2017	HH latrine obs	Observation	Amhara	Simada
11/14/2017	Water User	Interview	SNNP	Soro
11/14/2017	WASHCO	Interview	SNNP	Soro
11/14/2017	Water sample	Water Sample	SNNP	Soro
11/14/2017	CHW	Interview	SNNP	Soro
11/14/2017	Woreda Water Office	Interview	Amhara	Farta
11/14/2017	Woreda Health Office	Interview	Amhara	Farta
11/14/2017	Woreda Water Office	Interview	Amhara	Dera
				East
11/15/2017	Woreda Water Office	Interview	SNNP	Badawacho
				East
11/15/2017	Woreda Health Office	Interview	SNNP	Badawacho
11/15/2017	Water User	Interview	Amhara	Farta
11/15/2017	Water User	Interview	Amhara	Farta
11/15/2017	WASCHO	Interview	Amhara	Farta
11/15/2017	HH latrine owner	Interview	Amhara	Farta
11/15/2017	HH latrine owner	Interview	Amhara	Farta
11/15/2017	Water Sample	Water Sample	Amhara	Farta
11/13/2017	vvacer sample	Latrine	/ dilitara	T di ca
11/15/2017	HH latrine obs	Observation	Amhara	Farta
11/13/2017	THE TACTITIE ODS	Latrine	Allillala	I al ca
11/15/2017	HH latrine obs	Observation	Amhara	Farta
11/13/2017	THE TRUTTIC ODS	Observacion	7 Milliai a	East
11/16/2017	Water User	Interview	SNNP	Badawacho
11/10/2017	vvater Oser	Latrine	SININI	East
11/16/2017	HH latrine obs	Observation	SNNP	Badawacho
11/16/2017	nn laurine obs		SININF	
11/1//2017	LILI leavine ele-	Latrine	CNINID	East
11/16/2017	HH latrine obs	Observation	SNNP	Badawacho
11/1//2017	\\/atan aa : 1-	\\/a== C-	CNINID	East
11/16/2017	Water sample	Water Sample	SNNP	Badawacho
11/14/20:-	CLDA		CNINID	East
11/16/2017	CHW	Interview	SNNP	Badawacho
11/16/2017	WASCHO	Interview	Amhara	Farta

11/16/2017	Water User	Interview	Amhara	Farta
11/16/2017	CHW	Interview	Amhara	Farta
				East
11/17/2017	WASHCO	Interview	SNNP	Badawacho
				East
11/17/2017	HH latrine owner	Interview	SNNP	Badawacho
11/17/2017	WASCHO	Interview	Amhara	Dera
11/17/2017	Water User	Interview	Amhara	Dera
11/17/2017	Water Sample	Water Sample	Amhara	Dera
11/18/2017	WASHCO	Interview	SNNP	Soro
11/18/2017	MWA Implementer	Interview	SNNP	
11/18/2017	Water Sample	Water Sample	Amhara	Dera
11/18/2017	CHW	Interview	Amhara	Dera
11/18/2017	WASHCO	Interview	Amhara	Dera
11/18/2017	Water User	Interview	Amhara	Dera
11/20/2017	Woreda Water Office	Interview	SNNP	Tenbaro
11/20/2017	Woreda Health Office	Interview	SNNP	Tenbaro
11/20/2017	CHW	Interview	SNNP	Tenbaro
11/21/2017	WASHCO	Interview	SNNP	Tenbaro
11/21/2017	Water User	Interview	SNNP	Tenbaro
11/21/2017	couple nonfunctional	Interview	SNNP	Tenbaro
11/21/2017	WASHCO	Interview	SNNP	Tenbaro
11/21/2017	water sample	Water Sample	SNNP	Tenbaro
		Latrine		
11/21/2017	HH latrine obs	Observation	SNNP	Tenbaro
		Latrine		
11/21/2017	HH latrine obs	Observation	SNNP	Tenbaro
		Latrine		
11/21/2017		Observation	SNNP	Tenbaro
11/23/2017	MWA Implementer	Interview	Addis	Addis
11/23/2017	MWA Implementer	Interview	Addis	Addis
11/24/2017	CHW/latrine owner	Interview	SNNP	

## **ANNEX IV: BIBLIOGRAPHY**

- Abaire, Bekele and Catholic Relief Services/Ethiopia. "Arborloo and Marketing". Presentation at the Water and Health Conference at the University of North Carolina, Chapel Hill, NC, October 14-18, 2013.
- African Ministers' Council on Water. 2011. Water Supply and Sanitation in Ethiopia: Turning Finance into Services for 2015 and Beyond. Addis Ababa: Water and Sanitation Program.
- Amhara Regional Health Bureau. 2006. Whole System in the Room (WSR) Multi-stakeholder Meeting Technical Report: Aligning for Action: Sustainable Development through Safe Water, Environmental Sanitation and Hygiene. Water and Sanitation Program/World Bank and USAID/Hygiene Improvement Project.
- Amhara National Regional State Health Bureau. Woreda Resource Book: Community-Led Total Behavior Change in Hygiene and Sanitation: The Amhara Experience in Line with the Health Extension Program. Water and Sanitation Program/World Bank and USAID/Hygiene Improvement Project.
- Bakker, Eline. 2013. Situational Analysis on Sanitation Marketing: CRS Experience in 3 Woredas.
- British Geological Survey. 2001. *Groundwater Quality: Ethiopia*. Keyworth, Nottingham: National Environment Research Council.
- CARE International in Ethiopia. 2007. Final Report: Farta Water and Sanitation Promotion (FWSP) Project. Millennium Water Alliance, USAID.
- CARE International in Ethiopia. 2008. Terminal Report, Farta and Estie Water and Sanitation (FEWS) Project.

  Michael and Susan Dell Foundation.
- Catholic Relief Services. 2009. Final Report on Improving Community Water, Sanitation, and Hygiene in Bure Woreda, Amhara Region. USAID.
- Catholic Relief Services. 2010. *Improving Water and Sanitation Facilities in Jabi Tenhan Project Final Narrative Report.* USAID.
- Catholic Relief Services. Innovations in Water and Sanitation: Promoting ecological sanitation in Ethiopia through the Arborloo latrine. Brochure.
- Catholic Relief Services. WASH Facilities in Jabitehnan. USAID.
- Catholic Relief Services/Ethiopia. 2008. Final Narrative Progress Report: Improving Water and Sanitation Facilities in Badawacho Woreda. Millennium Water Alliance, USAID.
- Catholic Relief Services/Ethiopia. 2008. Final Narrative Progress Report, Badawcho: Improving of Water and Sanitation Facilities in Badawacho Woreda. Millennium Water Alliance.
- Catholic Relief Services/Ethiopia. 2008. Q1 Report, Annex A. I Bodowacho, Bure, and Jabitehinan.

- Catholic Relief Services/Ethiopia. 2014. July 2011-June 2014 Grantee Progress Report, Millennium Water Program. Millennium Water Alliance, Conrad N. Hilton Foundation.
- Catholic Relief Services/Ethiopia. 2014. Water, Sanitation, and Hygiene Fact Sheet.
- Center for Global Safe Water. 2008. Household Baseline Draft Report. Atlanta: Hubert Department of Global Health, Rollins School of Public Health, Emory University. Millennium Water Program, USAID.
- Center for Global Safe Water. 2014. Endline Evaluation Report: Millennium Water Alliance Ethiopia Program Partnership for Providing Water, Sanitation and Hygiene Services. Atlanta: Emory University.
- Central Statistical Agency [Ethiopia] and ICF. 2016. Ethiopia Demographic and Health Survey 2016: Key Indicators Report. Addis Ababa, Ethiopia, and Rockville, Maryland, USA. CSA and ICF.
- Central Statistical Agency [Ethiopia] and ORC Macro. 2006. Ethiopia Demographic and Heath Survey 2005. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ORC Marco.
- Central Statistical Agency. 2015. Statistical Report on the 2015 Urban Employment Unemployment Survey. Addis Ababa: Federal Democratic Republic of Ethiopia.
- Debela, T. H., Butterworth, J., Peace, J., Dimtse, D., and Getachew, H.. 2016. Introducing ICTs for WASH monitoring in Ethiopia. Abidjan, Côte d'Ivoire: Rural Water Supply Network.
- Dinku, Siseraw. 2010. Final Report: External Evaluation of Water, Sanitation and Hygiene Emergency
  Assistance and Preparedness in SNNPR, Ethiopia. Addis Ababa: Action contre la Faime International.
- Disaster Risk Management and Food Security Sector, MOARD. 2014. An Atlas of Ethiopian Livelihoods: The Livelihoods Integration Unit. Addis Ababa: USAID.
- Dundon, Susan and Jaleta, Malkamu. 2012. The Benefits of Shared Measurement Systems: Monitoring, Evaluation & Learning in the MWA Ethiopia Program. MWP Ethiopia.
- Food for the Hungry International/Ethiopia. 2007. First Quarter Progress Report: Simada Water Supply and Sanitation Project. Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2007. First Quarter Progress Report: Simada Water Supply and Sanitation Project. Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2007. *Quarter One Report: Achefer Community Water Supply and Sanitation Project.* Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2007. *Quarter Two Report: Achefer Community Water Supply and Sanitation Project.* Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2008. *Achefer Project: Annual Operational Work Plan.*Millennium Water Program Ethiopia, USAID.

- Food for the Hungry International/Ethiopia. 2008. *Completion Report: Simada Community Water supply and Sanitation Project.* Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2008. Fifth Quarter/First Quarter Extension Progress Report: Simada Water Supply and Sanitation Project. Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2008. *Project Status Summary: Achefer Community Water Supply and Sanitation Project.* Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2008. Proposal for Water, Sanitation and Hygiene Project (WASH) in Dangila and Noth Achefer Districts, Amhara Region. Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2008. *Quarter Four Report: Achefer Community Water Supply and Sanitation Project.* Millennium Water Alliance, USAID.
- Food for the Hungry International/Ethiopia. 2010. Annual Progress Report: Achefer Community Water Supply And Sanitation Project.
- Food for the Hungry International/Ethiopia. 2010. Final Evaluation Report: Achefer Community Water Supply And Sanitation Project. Millennium Water Program Ethiopia, USAID.
- Food for the Hungry International/Ethiopia. Dangila-Achefer Project Community Contribution Report: Achefer Community Water Supply and Sanitation Project. USAID.
- Fry, D., Mideksa, D., Ambelu, A., Feyisa, Y., Abaire, B., Cunliffe, K., and Freeman, M. 2014. *Adoption and Sustained Use of the Arborloo in Rural Ethiopia: A Cross-Sectional Study.* Catholic Relief Services.
- Hernandez, O., Rosenbaum, J., and Faris, K. 2011. *Combining sanitation and hand washing promotion: an example from Amhara, Ethiopia.* 35<sup>th</sup> WEDC International Conference, Loughborough, UK.
- Improve International. 2013. Collective Impact in Ethiopia 2004-2012: Independent Study of the Millennium Water Alliance WASH Program. Millennium Water Alliance.
- International Committee of the Red Cross. 2011. *Technical Review: Practical Guidelines for Test Pumping in Water Wells. Geneva, Switzerland.* https://shop.icrc.org/icrc/pdf/view/id/904
- Johnston, Rick. "Global SDG Indicators for WASH". Presentation at the National WASH Multi-Stakeholder Forum 8 at The Hilton Hotel in Addis Ababa, Ethiopia, March 30-31, 2017.
- Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP). 2017. Estimates on the use of water, sanitation and hygiene in Ethiopia. WHO and UNICEF.
- Lemma, Teshome. "Presentation on Increased Access to WASH Services: Experience from MWP-Ethiopia". Presentation at the International WaTER Conference at the University of Oklahoma, Norman, OK, October 24-26, 2011.

- Lifewater International and Ethiopian Evangelical Church Mekane Yesus Development and Social Services Commission. 2011. Final Report: Lemo and Soro Woreda Water supply, Sanitation and Hygiene (WaSH) Promotion Project. Millennium Water Alliance, Conrad N. Hilton Foundation.
- Lifewater International. 2007. Cost Extension Budget Summary Modification #5. Millennium Water Program, USAID.
- Living Water International. Shallow Water Wells Drilled in Zala, Kucha and Gofa Woredas of SNNPRG by LWI/EKHC from 2004-2006. USAID.
- Millennium Water Alliance. 2004. Third Quarter Report. MWP Ethiopia.
- Millennium Water Alliance. 2006. Millennium Water Program Baseline Survey Report: Amhar, Oromia, and SNNPR Regions, Ethiopia. USAID.
- Millennium Water Alliance. 2006. Progress Report of the Fourth Quarter of FY 2006. Millennium Water Alliance, USAID.
- Millennium Water Alliance. 2007. Progress Report of the 4th Quarter of 2006. MWP Ethiopia.
- Millennium Water Alliance. 2007. Proposal for Modification No. 5 for Millennium Water Program Ethiopia. USAID.
- Millennium Water Alliance. 2007. Technical Approach, 5th Modification to the MWA-EP Program. USAID.
- Millennium Water Alliance. 2009. Ethiopia Close-Out Report: Amhara Community Watershed Partnership Project. U
- Millennium Water Alliance. 2010. Millennium Water Project—Ethiopia Program Final Report. USAID.
- Millennium Water Alliance. 2013. Annual Report, FY 2012.
- Millennium Water Alliance. 2015. Fourth Quarter Report. MWP Ethiopia.
- Millennium Water Alliance, Brochure, USAID
- National Planning Commission. 2016. *Growth and Transformation Plan II (GTP II), Volume 1: Main Text.*Addis Ababa: Federal Democratic Republic of Ethiopia.
- PHAST Initiative. 1997. Participatory Hygiene and Sanitation Transformation. WHO and UNDP/World Bank Water and Sanitation Program.
- PSNP Plus. 2014. Real Impact: Ethiopia Case Study. USAID.
- Renwick, et. al, 2007, "Multiple Use Water Services for the Poor: Assessing the State of Knowledge," Winrock International: Arlington, VA. https://www.winrock.org/wp-content/uploads/2016/02/Multiple-Use-Water-Services-for-the-Poor-Assessing-the-State-of-Knowledge.pdf

- Suba, Misgina. 2009. The effect of Participatory Hygiene and Sanitation Transformation on improving hygiene and sanitation practices in East and West Hararghe zones, Oromia Region. Gondar: School of Public Health College of Medicine and Health Sciences, Gondar University.
- The Mitchell Group. 2008. Final Report: External Program Evaluation of Millennium Water Alliance (MWA) Water, Sanitation And Hygiene (WASH) Program In Ethiopia. USAID.
- The Water Institute at UNC. 2016. MWA Water Quality Study Report. Chapel Hill: The University of North Carolina at Chapel Hill. Millennium Water Alliance, Conrad N. Hilton Foundation.
- Troup, John. 2007. Final Program Narrative Report from Living Water International to Millennium Water Alliance. Living Water International.
- UNICEF. 2003. The State of the World's Children 2003. New York, NY: UNICEF.
- USAID Hygiene and Improvement Project. 2011. Results from Working at Scale for Better Sanitation and Hygiene in Amhara, Ethiopia: Baseline and Endline Comparisons of Institutional, Household, and School Surveys. Washington, D.C.: USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. Alaje-Ofla Highland Livelihood Zone (AOH). USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. Adiabo Lowland Livelihood Zone (ALL). USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. *Atsbi Wonberta Highland Livelihood Zone* (AWH). USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. Central Mixed Crop Livelihood Zone (CMC). USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. Enderta Dry Midland Livelihood Zone (HSS). USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. Eastern Plateau Livelihood Zone (EPL). USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. Gesho Wheat Highland Livelihood Zone (GWH). USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. *Humera Sesame and Sorghum Livelihood Zone (HSS)*. USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. *Irob Mountains Livelihood Zone (IRM)*. USAID.
- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. Mereb Basin Livelihood Zone (MRB). USAID.

- USAID. 2016. Ethiopia Livelihood Baseline Profile: Tigray Region. *Middle Tekeze Livelihood Zone (MTK)*. USAID.
- USAID/Ethiopia. 2003. Annual Report FY 2003.
- WASHplus. 2016. Final Report: Developing and Testing Innovative WASH Approaches in Ethiopia. Washington D.C., USA: USAID/WASHplus Project.
- Water and Sanitation Program. 2011. Learning by Doing: Working at Scale in Ethiopia. World Bank.
- Water CKM/USAID. 2016. Ethiopia Water and Sanitation Profile. USAID.
- Water for Africa through Leadership and Institutional Support (WALIS)/USAID. 2017. Africa, WASH, and the Millennium Development Goals. Washington, D.C.: USAID.
- WaterAid. 2012. *July-December 2011 Grantee Progress Report, WaterAid's Gamo-Gofa WASH Program.*Millenium Water Alliance, Conrad N. Hilton Foundation.
- WaterPartners International. 2007. Millennium Water Program Final Report. USAID.
- World Bank. 2017. Integrated Surveys on Agriculture Ethiopia: Ethiopia Socioeconomic Survey (ESS). http://microdata.worldbank.org/index.php/catalog/2783/study-description (December 20, 2017)
- World Vision. 2009. Beneficiaries, Kebeles and Gots of the Constructed WASH projects. USAID.
- World Vision. 2009. Quarter Four Report: Omo Bada Water, Sanitation and Hygiene Project. USAID.
- World Vision/Ethiopia. 2007. Final Report: Dimtu Water and Sanitation Project at Wonchi ADP. Millennium Water Alliance, USAID.
- World Vision/Ethiopia. 2007. Final Report: Sibiya Water and Sanitation Project at Shenkolla ADP. Millennium Water Alliance, USAID.
- World Vision/Ethiopia. 2007. *Quarterly Progress Report, First Year Third Quarter.* Millennium Water Program in Ethiopia.