USAID FROM THE AMERICAN PEOPLE | HIP HYGIENE IMPROVEMENT PROJECT

TRIALS OF IMPROVED PRACTICES (TIPs)

Determining Feasible Water and Feces Management Small Doable Actions for HIV Programs in Ethiopia

2009

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ACRONYMS

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
CCF	Christian Children's Fund
COP	Community of practice
CRS	Catholic Relief Services
HBC	Home-based care
HIP	Hygiene Improvement Project
HIV	Human immunodeficiency virus
NGO	Nongovernmental organization
OVC	Orphans and vulnerable children
PLWHA	People living with HIV/AIDS
PMTCT	Preventing mother-to-child transmission
SAVE	Save the Children/USA
SDA	Small doable action
USAID	United States Agency for International Development
TIPs	Trials of improved practices
WASH	Water, sanitation, and hygiene

EXECUTIVE SUMMARY

Diarrheal disease is the most common opportunistic infection in people living with HIV/AIDS (PLWHA) in resource limited settings. Diarrhea is very debilitating and negatively affects the PLWHA's quality of life. Household members and especially children are at risk of contracting diarrhea from PLWHA suffering from bouts of diarrhea. Improving water, hygiene, and sanitation (WASH) helps prevent diarrhea in PLWHA and their households and enhances the quality of life. The major challenge is how to integrate WASH into HIV programs. To address this challenge, USAID/HIP worked with NGOs providing home-based care services in Ethiopia to design and carry out a trial of improved practices (TIPs) to help identify the water, hygiene, and sanitation small doable actions (SDA) to be integrated into HIV programs. A rapid assessment was carried out in Amhara Region in December 2007. The SDA were reviewed with NGOs partners in Addis to identify the WASH behaviors to be explored in the TIPs. Water and feces management were the two areas that required more information and were thus selected for the TIPs. Further, despite the high risk of HIV transmission associated with menstrual blood, very little is known about HIV-positive women's hygiene practices during menstruation. To fill this gap, USAID/HIP also included this topic in the TIPs.

For seven weeks trained data collectors and home-based care workers visited 62 PLWHA in Adama, Addis, Alemtena, and Wonji—urban, peri-urban, and rural sites in the Oromo Region.

The first visit helped gather information on WASH practices and identify the WASH practice that most needed improvement. The data collector negotiated with the participant to try a set of small doable actions to help improve the behavior. The second visit, which took place three days later, helped identify the constraints in implementing the SDA. The data collector negotiated and helped the participant find solutions to the identified constraints. The third visit helped identify the perceived benefits and motivations, constraints, and solutions. The fourth visit helped gather information on the SDA that were adopted, the perceived benefits and motivations, and the proposed modifications to make the SDA feasible for most PLWHA.

USAID/HIP reviewed the findings from the Oromo and Amhara regions and developed recommendations on the WASH SDA to be integrated in the home-based care programs in Ethiopia. These are listed in the box below.

Small Doable Actions

1. Water management (urban and rural)

1.1 Drinking water source and container

- Reserve a 20-liter jerry can or *ensera* (clay pot) with a proper cover for drinking water.
- Attach the cover to the ensera or jerry can using a string to keep it off the floor.
- Treat drinking water contained in the 20-liter jerry can or ensera with Wuha Agar.
- Use narrow mouth 20-liter jerry can or ensera with a cover to store drinking water.

1.2 Serving drinking water

- Pour water from jerry can or ensera into a clean cup or glass OR pour into a clean jug with cover and then pour into a clean glass. If a jug is used, the jug should have a cover and be reserved for serving drinking water only. When drawing water, don't put hands in the water.
- Wash jug and its cover with soap and water every day.

1.3 Keep drinking water safe and jug and glass/cup clean

- Keep the jerry can, ensera, and jug covered during day and nighttime.
- Put the clean cup and glass upside down on a clean tray on a shelf or a table.
- Store the jerry can or ensera out of the reach of animals and children.

2. Feces management

2.1 Infrastructure/equipment for proper disposal of feces

- If latrine is not available, construct an Ecosan latrine with superstructure (walls) from local materials.
- Use latrine and/or the potty and/or plastic bag for all family members.
- Put a handful of ash in the latrine after defecation (to get rid of the smell and the flies).
- Put ash/sand in potty before use.
- Immediately dispose of the feces in the potty or plastic bag in the latrine or trashcan.
- Put used paper in a tin.

2.2 After defecation

- Wash the potty with water and soap, ash or sand.
- Place potty out of the reach of children.
- Wash hands with water and soap or ash after disposing of the feces from the potty or after using the latrine, cleaning a baby's or anyone's bottom, or when tending to a patient.

3. Diarrhea management for bed-bound PLWHA

3.1. Sleeping pattern practices of bedridden PLWHA

- Caregivers should spread a plastic sheet (or cut open plastic bags) across the part of the bed under the buttocks and completely cover the plastic with a piece of cloth. (Have several pieces of cloth available for use so when one is soiled it can be immediately replaced with another. These can be made from old skirts, dresses, or bed sheets.)

3.2. Care for bed-bound PLWHA suffering from diarrhea

- Caregivers should use gloves when caring for PLWHA suffering from diarrhea.
- Caregivers should wash feces stained/soiled cloth, bed sheets, and clothes of the sick person with water and soap and dry it in the sun.
- Caregivers should always wash hands with water and soap after caring for PLWHA suffering from diarrhea.

3.3. PLWHA is alone

- If PLWHA is alone and very weak, after defecating, roll over and reposition; lean on the side while waiting for someone to help.

4. Hand washing (urban and rural areas)

- Make and use tippy tap for hand washing. If necessary, build a tippy tap next to the bed to make it easy for PLWHA to wash. Place a bucket below the tippy tap to catch the water.
- Wash hands with soap or ash, rub hands together at least 10 times, attending to the forgotten spots like under the nails, between the fingers, to the wrists. Dry in the air. Don't let the water pour while rubbing to save water.
- Wash hands properly with water and soap or ash before meals and cooking, after using the toilet, after cleaning baby's bottom, before and after attending to the patient, whenever going near dung, and after cleaning the potty.
- If you come into contact with blood, feces, urine, or vomit while attending to the patient, wash your hands immediately after cleaning these up; do not wait.

5. Menstrual management practices

5.1 Protection during menstruation

- Use a clean piece of cloth from linen or cotton material or a clean pad.
- Store the used piece of cloth in a plastic bag during daytime to prevent contact with the blood-stained material.

5.2 Hygiene during menstruation

- Dispose of the used pad in the latrine or in the trashcan.

Washing the cloth

- Wash the cloth.
- Wash the used piece of cloth with soap and water at night. (Caregivers should wear gloves to protect their hands.)
- Dry on the line/hang at night and collect early in the morning.
- Keep the clean and dry pieces of cloth in a clean box after menstruation.

5.3 Cleaning the stained dress/bed sheet

- Remove the dress, linen/bed sheet and wash with soap and water.
- Dry the dress, linen/bed sheet outside the house under the sun.

The TIPs findings have policy and program implications for both the HIV and WASH sectors. For the HIV sector, the TIPs findings shed light on the feasible WASH SDA for the poorest who have inadequate WASH practices and high morbidity and mortality from diarrheal diseases. Policy makers should acknowledge the importance of improved WASH practices for PLWHA and include WASH SDA in national HIV policy guidelines. WASH can be integrated into numerous HIV programs including prevention, care and support, treatment, orphans and vulnerable children (OVC), and preventing mother-to-child transmission (PMTCT). HIV prevention care and treatment programs also need to develop a language to use to integrate WASH into their programs. When developing WASH policies and programs in communities, the WASH sector should explore the special needs of groups such as sick and weak people that include symptomatic PLWHA. The WASH sector can also provide guidance on the most appropriate infrastructure/equipment for sick and weak people to properly manage their feces.

Programs also need to develop a behavior change communication strategy to improve WASH practices at household levels and to strengthen the capacity of home-based care workers to negotiate WASH SDA with each target audience. Cross-sectoral coordination

between the WASH sector and HIV programs would benefit both and help to improve services at national, regional, and community levels.

I. INTRODUCTION

A growing number of studies have demonstrated the importance of good water and sanitation practices for improving the health and quality of the life of people living with HIV/AIDS (PLWHA). The major challenge remaining is how to integrate water and sanitation practices into HIV programs. To fill this gap, USAID/HIP is engaged at global and country levels to help integrate hand washing, feces management (sanitation), and safe water actions into home-based and palliative care for PLWHA.

In Ethiopia, USAID/HIP has pursued two distinct but related opportunities to develop concepts, guidance, guidelines, and materials to support integrating WASH into home-based care programs.

Abt Associates and PSI launched an initiative to integrate safe water and hygiene practices for PLWHA through four pilot modalities. In 2007, USAID/HIP joined Abt Associates and PSI's effort and carried out a rapid assessment to identify small doable water, hand washing, and feces management actions that could be integrated into home-based care programs in Bahir Dar, Ethiopia. The target audience included PLWHA in the urban and peri-urban contexts.

Concurrent to this, USAID/HIP also spearheaded a countrywide initiative to explore feasible, effective actions for feces management and hygiene in the home-based care context; first by conducting some formative research and then testing those "small doable actions" in a pilot context. Forming a Community of Practice (COP), USAID/HIP has worked jointly with international NGOs working in Ethiopia—Catholic Relief Services (CRS), Save the Children/USA (SAVE), and Christian Children's Fund (CCF)—to identify, pilot, and implement approaches for integrating WASH into home-based care.

The list of small doable actions (SDA) for water and sanitation generated with the PSI-supported home-based care NGOs in Bahir Dar was reviewed and modified by the COP to address the broader catchment context of these organizations to ensure "their" questions were also addressed in the formative research. Further, despite the high risk of HIV transmission associated with contact with menstrual blood, very little is known about HIV-positive women's hygiene practices during menstruation. To fill this gap, USAID/HIP added this topic to the behaviors being explored during the trials of improved practices (TIPs) in Ethiopia.

The final list of behaviors to be explored during the TIPs included:

- Feces management
- Water management
- Menstrual management practices

In June 2008, HIP and the COP designed and carried out the TIPs on these behaviors to identify feasible water, sanitation, and hygiene SDA that could be integrated into HIV programs in Ethiopia. The following section highlights the objectives of the TIPs.

II. DESIGN OF THE TRIALS OF IMPROVED PRACTICES

2.1 Objectives

The objectives of the TIPs were to:

- Identify the current water, sanitation, and feces management practices, and when appropriate, menstrual management practices for women
- Test the acceptability and feasibility of the SDA related to water and feces management and identify the SDA successfully tried and accepted by the target audience
- Identify perceived barriers/constraints that prevent the target audience from implementing the proposed SDA and highlight recommended changes to make these options more acceptable and feasible for target groups
- Identify the perceived motivations/benefits for the target audience when trying the small doable actions they have chosen

2.2 Sites

Four TIPs sites were selected among the COP home-based care programs. To facilitate data collection, the sites chosen were all in the same region: Oromo. Table 1 below shows the four sites: Alemtena, Wonji, Addis Ababa, and Adama.

Table 1: Sites and participants in each site

Sites	Type of settings	Number of participants in the TIPs
Adama	Urban	13
Addis Ababa	Urban	11
Alemtena	Urban and rural	20
Wonji	Peri-urban and rural	18
		Total: 62

Information gathered from the TIPs will complement information generated by the rapid assessment conducted in Bahir Dar and provide an overall picture of water and feces management, and hand washing SDAs for PLWHA in Ethiopia.

Most TIPs sites were urban and peri-urban because most home-based programs supported by the COP were located in these settings. The main characteristics of urban sites included:

- High population density; limited or no space around the house
- Inhabitants rent room/house and usually shared a latrine either with people living in the same compound or with people living in the same community
- Latrine use required fees or maintenance contribution
- Trade and daily labor were the primary income sources

Peri-urban sites (Alemtena and Wonji) were situated on the outskirts of a city and had most of urban site characteristics. However, the population density was lower and some neighborhoods were rural.

Rural setting characteristics were:

- Low population density
- Inhabitants typically owned their houses, which are situated on farmland far from the city
- Open defecation was a common practice
- Farming was the primary source of income

2.3 Tools

The TIPs tool was developed and reviewed with the researchers during the training, then pre-tested, finalized, and translated into Amharic after the first TIPs application in Alemtena. See Appendix 1 for finalized TIPs tool. Table 2 shows the three components of the tool.

Component 1 was used during the first week of the TIPs:

First visit

- Identify the participant and collect information on participant's characteristics
- Gather information on the current water and feces management practices, and if appropriate, menstrual management practices
- Identify the behavior to be improved and negotiate the SDA to be implemented

Second visit

- Identify the constraints/barriers to the implementation of the SDA, and discuss and negotiate any changes and solutions

Component 2 was used during the three week follow-up visit to:

- Gather information on the SDA each participant implemented
- Identify perceived benefits and motivations for trying the SDA
- Identify the barriers/constraints to implementing the SDA
- Collect participants' suggestions on the solutions/changes to address the constraints

Component 3 was used during the six week-follow up visit to:

- Identify the SDA that the participant had adopted
- Gather the participant's suggestions on the changes to be made on each SDA for them to be feasible for people in the target group

Table 2 also lists the techniques and methods used and key information collected during each visit. The techniques and methods varied depending on the type of information collected. For example, data collectors conducted interviews to gather less sensitive information such as participant characteristics, while they negotiated with participants to help them make an informed choice. For more accuracy, two methods were sometimes combined such as using observation when interviewing participants on water and feces management practices.

Table 2: Components of the tool used for the TIPs research, methods, and key information collected

Section	Visit	Methods and key information to be collected
Component 1-	First visit	*Interview*

First week		▪ Participant identification and characteristics
		Interview and observation ▪ Water and feces management practices, and when appropriate, hygiene practices during menstruation
		Negotiation ▪ Behavior to be improved and the small doable actions to be tried
	Second visit, 2-3 days later	*Interview, observation, and negotiation* ▪ SDA being implemented or not. Constraints to the implementation of the SDA and proposed/ negotiated solutions
Component 2- Three weeks later	Third visit	*Interview and observation* ▪ SDA that has been implemented and perceived motivations and benefits from implementing the SDA
		Negotiation ▪ SDA not implemented or difficult to implement—constraints and proposed/negotiated solutions/changes
Component 3- Six weeks later	Fourth visit	*Interview and observation* ▪ SDA that has been implemented/adopted and perceived benefits and motivations of the participant
		Interview ▪ Recommendations on the changes to make the SDA feasible for most people from the target audience

2.4 Data Collection

2.4.1 Data Collectors

A team of 11 people collected data from June to August 2008. Each team included at least one data collector and one home-based care worker.

The home-based care worker came from the site where the TIPs research was being implemented and his or her primary responsibility was to identify the TIPs participants, inform them, and get their approval to participate in the TIPs prior to the launch of the TIPs research. Specific tasks of the home-based care workers were to:

- Identify PLWHA households that met the selection criteria
- Make an appointment with each head of household
- Introduce the researchers during the TIPs

The data collectors were officers from the COP organizations and supervisors of home-based care workers who participated in the TIPs training. Their training/background included nursing, community mobilization, and program management. The data collectors used the TIPs tool to gather information on the water and sanitation practices and negotiate the small doable actions to improve a specific behavior. The HIP country coordinator participated in the TIPs research at all sites.

2.4.2 Data Collectors Training

Prior to conducting the TIPs, the data collectors and home-based care workers participated in a three-day training. The training parameters are outlined in the box below.

Box 1 : TIPS Training Parameters

1. Goal

To equip data collectors and home-based care workers with the knowledge and skills to conduct the TIPs on WASH with PLWHA in Adama, Addis Ababa, Alemtena, and Wonji.

2. Objectives

1) Review the evidence base and rationale for comprehensive WASH within home-based care programs
2) Learn how to conduct the TIPs
3) Plan the TIPs

3. Sessions

Session 1: Introduction
Session 2: WASH and HIV
Session 3: Acquiring the skills to conduct the TIPs
Session 4: Practicing TIPs follow-up visits
Session 5: Planning the TIPs in each site

2.5 Analysis

The data were coded, entered into SPSS, and processed to provide frequencies on indicators/parameters listed in box 2 below.

Box 2: List the Indicators/Parameters in this Box

- Background information
  Characteristics of the participants: gender, age, matrimonial status, setting, ownership of the house, presence of children, ART

- First week visit
  - WASH practices in different setting and per gender
  - SDA to be implemented in different setting and per gender
  - WASH practices to be improved per setting
  - SDA tried per setting

- Three week visit
  SDA implemented per setting – motivations/benefits – constraints/barriers

- Six week visit
  - SDA implemented consistently for six weeks – motivations and benefits
  - Suggested changes to make the SDA feasible for most PLWHA

The analysis reviewed the SPSS outputs in the light of the detailed information generated on each indicator/parameters and collected during the TIPs to draw the conclusions and recommendations on feasible SDA.

The following section provides information on the participants in the TIPs research.

III. CHARACTERISTICS OF TIPs PARTICIPANTS

Sixty-two PLWHA registered in home-based care programs supported by organizations in the COP participated in the TIPs. They are referred to as participants.

3.1 Gender and Age

Most participants (51/62) were female; one-fifth (11/62) were male. The participants ranged in age from 19 to 71 years old. As shown in table 3, almost half the participants (28/62) were under age 30. One-third (19/62) were ages 31–40, and less than one-fifth were age 41–50, and only four participants were over age 50.

Table 3: Age of the participants

Age group	Frequency
20–30	28
31–40	19
41–50	11
> 50	4
Total	**62**

3.2 Matrimonial Status

Table 4 shows the distribution of the participants according to their matrimonial status. Most participants (39/62) were single, either widowed (23/39) or divorced (18/39). Nearly one-third were married (19/62).

Table 4: Distribution of the participants according their marital status

Marital status	Frequency
Married	19
Divorced	6
Widowed	23
Other (not disclosed)	4
Total	62

3.3 Ownership of the Residence

Almost two-thirds of the participants (38/62) in the TIPs rented the room/house they lived in and one-third (24/62) owned it. All participants in rural areas owned their home as shown in table 5.

Table 5: Ownership of residence per type of settings

Ownership	Type of Setting			
	Urban	Peri-urban	Rural	Total
Rented	19	19	0	38
Own	5	12	7	24
Total	24	31	7	62

3.4 Households with Children

Most participants (49/62) had a least one child and a few (13/62) did not have any children.

3.5 Participants on ART

Most participants (46/62) were on antiretroviral therapy (ART).

IV. TIPs RESULTS

This section presents the results of the TIPs and will describe:

- Water and feces management practices and, when appropriate for women, menstrual management practices
- For water and feces management, the SDA tried and the perceived benefits and motivations, the changes to make for the SDA to be implemented by most people in the target group

During the first visit, after establishing a good contact with each participant and collecting participant's background information, the data collector explored and observed the participant's water and feces management practices. If the participant was a woman, the female data collector assessed/explored her menstrual management practices. The following sections highlight the information generated.

4.1 Water, Feces, and Menstrual Management Practices

4.1.1 Water Management Practices

a) Source of Drinking Water

Tap water is the main source of drinking water. Almost all (57/62) participants get their drinking water from tap water. A few participants (5/65) get drinking water from an unprotected well or spring. Water is scarce; all participants who get tap water pay for it either from individual water sellers, government tap water, or private tap owners.

b) Drinking Water Container

A jerry can is most commonly used for storing drinking water (50/62). The jerry can size varies from 10 to 25 liters. Most jerry cans have a narrow neck though some types have a large mouth. A few participants (12/62) store drinking water in a bucket or another container such as clay pot called “ensera.” A good number of participants (46/62) properly covered the drinking water container; while one quarter did not cover the water container properly or at all.

c) Drawing and Serving Drinking Water

Most participants (44/62) used an uncovered jug to draw water from the jerry can. Water from the jug is poured into a glass or cup when served.

Half of the participants (33/62) dipped their hands into the water when drawing water. All participants, using a bucket to store drinking water, dipped their hands in the bucket while drawing water. Over half the participants (27/52) using a jug to draw drinking water from the jerry can also dipped their hands into the water contained in the jug.

The majority of participants (44/62) covered the drinking water container after drawing water. Over half (39/62) placed the glass or the cup upside down on a clean surface such as a tray or shelf. Most of the time (43/62), a drinking water container is placed where it can be reached by children or animals.

4.1.2 Feces Management Practices

a) Feces Management for Mobile PLWHA

Most participants (38/62) used a latrine; either shared latrine (27/38) or privately owned latrine (11/38). Almost all the participants in rural areas (6/7) did not have or use a latrine.

- *Feces management during daytime*

The majority of participants used the latrine during daytime. Some (18/62) practice open defecation and a few (5/62) use the potty/bedpan. This trend is similar for men and women. Almost all the participants (6/7) in the rural area practice open defecation. For the five participants with children under age five, two reported that their child used the latrine, two others used the potty/bedpan, and one practiced open defecation.

- *Feces management during nighttime*

Almost half (27/62) of participants used the latrine at night, one-quarter (17/62) used the potty, and the other quarter (18/62) used open fields for defecation. Two participants said they use a plastic bag at night. Four participants out of the five with children under age three said their children used the potty at night, and one child practiced open defecation.

b) Feces Management for Bed-Bound Participants

Most participants have never been bedridden; therefore, their responses correspond to what they think bed-bound people feces management practices are. The presumed feces management practices for bedridden during day and nighttime are very similar.

- *During day and nighttime*

More than half of participants said that bed-bound people use the potty/bedpan, and according to one-third, bed-bound people practice open defecation, and two said bed-bound people use the latrine. Most of the time feces from the potty/bedpan would be disposed of in the latrine. One-third said the feces from the potty would be dumped in the open field or into the drainage. Two participants said the feces from the potty/bedpan would be disposed of in the trashcan.

- *Behavior after disposing of the feces*

Most participants do not wash the potty/bedpan properly after disposing of the feces during day and night. Two-thirds (22/35) of participants said they wash the potty with water only. One-third (13/35) said they wash the potty/bedpan with water and soap.

c) Hand Washing after Defecation

Proper hand washing with water and soap after defecation is not a common practice for mobile or bed-bound PLWHA. Less than half (30/62) said they wash their hands with water and soap after defecation, a quarter (14/62) wash their hands with water only, and one-third (18/62) do not wash their hands at all. Less than half (28/62) of participants had soap at home during the TIPs. Soap was not available most of the time in the rural areas (1/7).

4.1.3 Menstrual Management Practices

Discussions were held about menstruation with 51 women participating in the TIPs. Since this was a very sensitive issue, a female data collector discussed this topic last and alone with the participant. Menstrual management practices were similar in all sites and settings.

a) Characteristics of the Women

More than two-thirds (37/51) of women who participated in the TIPs continued to menstruate. The age range of these women varied from 19 to 45. Most women less than 45 (26/34) have their period/menses every month.

b) Menstrual Management Practices

The reported hygiene practices during menstruation are very good. Women are very discrete about menstrual management practices. They clean, dry, and store materials used during menstruation out of the sight of people. The material used for protection during menstruation depended on the purchasing power of the woman. Most women used a piece of cloth (21/37), one-quarter used pads, and a few used other materials such as more than one locally made pair of underwear at a time. Women using pads disposed of them mostly in the latrine (8/10) and a few in garbage can (2/10). Women washed the stained piece of cloth with water and soap.

The most common places used to dry the piece of cloth used during menstruation included under the bed, on the line in the house, and outside the house at night.

c) Perception of the Risk Associated with Contact with Menstrual Blood

There was a good awareness of the risk associated with the contact with menstrual blood. Two-thirds (21/37) said there was a risk of HIV transmission associated with the contact of menstrual blood and one-third said they did not know if there was any risk. The awareness of the risk associated with contact with menstrual blood was very low in the rural area. Only one of the seven rural women knew that HIV could be transmitted to anyone who came in contact with menstrual blood.

4.2 Feasible Small Doable Water and Feces Management Actions

Because the reported behavior on hygiene practices during menstruation for all participant women was good, hygiene practices during menstruation were excluded from the behaviors to be tried during the TIPs. The behaviors tried were related to water and feces management.

Almost half the participants (35/62) were enlisted to improve water management practices and the other half tried improved feces management practices as shown in table 6.

Table 6: Behaviors tried per type of settings

Behavior to be Improved	Type of Setting			
	Urban	Pre-urban	Rural	Total
Water management	13	21	1	35
Feces management	11	10	6	27
Total	24	31	7	62

After collecting information on water and feces management practices during the first TIPs visit in each household, the data collectors reviewed the data collected to help determine:

- SDA already being implemented
- Behavior to improve and the SDA to be implemented

For each participant, only one behavior was targeted for improvement. The selection of the behavior to be improved depended on which (water or feces management) needed the most improvement. To identify the SDAs to be tried, the data collectors compared the recommended SDAs for the specific behavior with the SDA already being implemented. Box 3 shows the recommended SDA for water and feces management to be examined during the TIPs.

Box 3: SMALL DOABLE ACTIONS to be Examined during the TIPs

WATER MANAGEMENT

1. Drinking water container

Reserve a container (jerry can or bucket with cover) for drinking water and a cup or glass or ladle for drawing water from the container. When possible, encourage only jerry can use.

Always use a clean and covered jerry can/bucket for storing drinking water.

2. Treating drinking water at the point of use

- Use Wuha Agar to treat drinking water.
- Use a 20-liter jerry can or bucket.
- Use Wuha Agar cover, and measure one capful.
- Put in the 20-liter jerry can and shake. For the bucket, use a clean ladle to mix. Cover.
- Leave for 30 minutes and then serve
- Keep the container (jerry can, bucket) always covered.

3. Drawing drinking water from the container

If the drinking water container is a 20-liter jerry can:

- Pour water from the jerry can into a clean cup or glass. **Or** pour water from jerry can into a clean jug. Use a clean cup or glass to serve drinking water.
- Cover the jerry can and the jug during day and nighttime.
- Wash jug and cover with water and soap every day.

If the drinking water is stored in the bucket:

- Use a long neck ladle or "kel" to draw water from the bucket and pour water into cup or glass.
- Cover the bucket always during day and nighttime.

4. Storing the jug, ladle, or cup/glass

- Hang the ladle and cup on a nail—or hang the ladle on a nail and put the cup or glass on a shelf—or put the ladle and cup into a covered clean utensil and put the cup and glass upside down on a clean tray on a shelf or a table.

5. Storage—out of reach of animals and children

- Put the jerry can and bucket with drinking water out of the reach of children and animals (To be specified in each situation, according to what is available.)

FECES MANAGEMENT

1. Infrastructure/equipment for proper disposal of feces

- Construct a latrine with a superstructure from local materials. Use latrine and or the potty, and/or plastic bag for all family members.
- Put ash into the latrine after defecation to prevent flies and bad smell.
- Put ash/sand in the potty before use.
- Put the used paper in a tin.
- Dispose of the feces in the potty in the latrine immediately after use.

2. After defecation

- Wash the potty with water, soap, or ash or *lematoxin* (ENDOD) or sand.

- Place the potty out of the reach of children.
- Wash hands with water and soap or ash after disposing of the feces from the potty or after using the latrine, or cleaning the baby's bottom.

After determining the SDA to target, the team reconvened with the participant to:

- Congratulate him/her for the SDA already being implemented
- Present the behavior to be improved and negotiate the SDA to be implemented

The following sections outline for each behavior, the SDA that were tried, the motivations and perceived benefits of trying the SDA, the barriers/constraints encountered in the implementation and the proposed solutions, and the proposed changes to make the SDA feasible for the majority of the target population.

4.2.1 Water Management

a) SDA Already Being Implemented and Practices to be Improved Are Shown in Table 7

Table 7: Already implemented SDA and practices to be improved

Already implemented SDA	Practices to be improved
▪ Most people used a narrow neck jerry can with cover to store drinking water ▪ Most people placed the glass or cup for drinking water upside down on a tray or a shelf/table	▪ Drinking water is not treated ▪ A good number use uncovered and unclean jug to pour water from the jerry can ▪ Most people dip hands into the bucket and into the jug when drawing water ▪ The drinking water container is reachable by children and animals

The assessment of water management practices with TIPs participants also revealed that:

- Most people using a bucket to store drinking water had also at least one jerry can at home.
- An appropriate utensil such as a ladle or "kel" to draw water from the bucket was never available. Moreover, the practice of using a ladle to draw drinking water is not known. The ladle is used only to dish out cooked food.
- When people use a jug or glass to draw water from the bucket or large mouth jerry can, most dip their hands in the water.

Therefore, data collectors negotiated with participants using the bucket or the large mouth jerry can to switch to 20-liter narrow neck and covered jerry can.

b) Small Doable Actions Tried and Motivations and Perceived Benefits

Table 8 shows the SDAs that were tried and the stated/perceived benefits and motivations for trying these SDAs

Table 8: SDA tried and motivations & perceived benefits for implementing the SDAs

Small doable actions tried	# people who tried it	Motivation and perceived benefits
1. Store and treat drinking water		
▪ Store in a 20-liter narrow neck covered jerry can	25/35	20-liter jerry can is convenient to fetch water with (6/25).Water in jerry can is not easily contaminated. Children cannot dip in the jerry can. Is convenient for treating water with the exact amount of Wuha Agar.
2. Treat water at the point of use	31/35	
▪ Use Wuha Agar to treat drinking water	31/35	Treated water tastes good (14/31). Treated water is safer and helps stay healthy (17/31).
▪ Use Wuha Agar cap, and measure one capful	31/35	
▪ Put in the 20-liter jerry can and shake – then cover	31/35	
▪ Leave for 30 minutes and then serve	31/35	
▪ Keep the jerry can always covered	31/35	Protect from contamination
3. Draw drinking water from the jerry can		
▪ Pour the water from the jerry can into a clean cup or glass	10/31	It is convenient to pour directly into a glass (2/10). It helps to see if water that I drink is clean or not (2/10). Dirty glass is more easily detected and washed than a jug (2/10).
▪ **Or** Pour water from jerry can into a clean jug; use a clean cup or glass to serve drinking water.	14/31	Water will not be wasted (5/14). Reduces the frequency from pouring water from the container and limits the risk of contamination (2/14). Easy access to drinking water for children (2/14) when drinking water is in the jug.
▪ Wash jug and cover with water and soap every day ▪ Cover the jerry can and the jug during day and nighttime.	31/31	Protects from contamination
▪ Put the clean cup and glass upside down on a clean tray on a shelf or a table	21/31	Protects the glass from contamination from dust and flies (16/21).

4. Store out of reach of animals and children		
▪ Put the jerry can containing drinking water out of the reach of children and animals	16/31	It prevents children from accessing the treated water so they don't waste it (7/16).

- *Storing and Treating Drinking Water*

Treating drinking water with Wuha Agar was negotiated with and well received by most participants (31/35) enlisted in the water management trial. A few participants receiving their ART supply from one of the hospitals in the area had used Wuha Agar to treat drinking water before, because Wuha Agar was sometimes supplied with ART. The data collector used a simplified version of a PSI brochure on treating water with Wuha Agar to explain the steps to follow when treating water. Each step agreed upon with the participant was circled. The brochure with the steps circled was given to the participant and served as contract and as a reminder for the SDAs to be implemented by the participant. During the follow up visit, the data collector referred to the agreement made in the contract to initiate the discussion on the water management SDAs. Most participants followed the steps agreed upon in the contract.

The size of jerry cans used to store drinking water varied from 10 to 25 liters. One measure of the cover of Wuha Agar was to be used to treat 20 liters of water. Data collectors negotiated with participants using buckets and large mouth jerry cans and other size jerry cans to switch to a 20-liter jerry can. Most participants (25/31) switched to the 20-liter jerry can. The reported perceived benefit for switching to the 20-liter narrow neck jerry can was that "it is more convenient to fetch drinking water" and was also accurate when treating drinking water.

The reported perceived motivations/benefits for treating drinking water by most participants were that participants stayed healthy and the water tasted good.

- Wuha Agar kills germs in the water so we stay healthy (17/31).
- Treated water has a better taste, more satisfaction after drinking water (12/31).

- *Drawing Drinking Water*

Two options **using a jug or a glass** were proposed to draw water from the jerry can: either pouring water directly into a clean cup or glass or pouring in a clean jug and then pouring it into a cup or glass.

Households without children said they could draw water from a jerry can by pouring water directly in a cup or glass.
The benefits evoked for pouring water directly into a glass include:

- Convenient to pour directly into a glass (2/10). "A clean glass is attractive to drink water with."
- Helps to see if water that I drink is clean or not (2/10).
- Dirty glass is more easily detected and washed than a jug (2/10).
- Limits contamination when water is poured directly into the glass.

The participants with children preferred pouring drinking water into a clean jug before pouring it into a glass for the following reasons:

- Water will not be wasted (5/14).

- Reduces the frequency of pouring water from the jerry can and limits the risk of contamination (2/14).
- Jug with drinking water is easily accessible to children (2/14).

The place to keep the cup or glass used for drinking water depended on what was available in each house. The assessment of water management practices during the TIPs revealed that most people put the clean cup and glass upside down on a clean tray, shelf, or a table. This existing practice was proposed to those who did not yet practice it.

Putting the glass or cup upside down on a clean surface was very well received by most participants (20/20). They claimed that putting the glass or cup upside down prevented the dust and flies from entering the glass and kept the glass clean for a longer period of time. They claimed that putting the glass or cup upside down prevented the dust and flies from entering the glass (8/20) and kept the glass clean for a longer period of time (8/20).The rest of the participants (4/20) claimed that a glass/cup placed upside down when washed consumes a small amount of water than an upside up placed glass/cup.

Covering the jerry can and the jug after use during day and night was well received because it protects the water from becoming contaminated.

Special attention was paid to the cleanliness of the jug and its cover. Participants using the jug were encouraged to wash the jug and the cover with water and soap every day. These practices were well received. The reported perceived benefit was to protect water from becoming contaminated.

- *Storing Drinking Water Container Out of the Reach of Animals and Children*

This SDA was recommended and well received by most participants. The place to store the drinking water container was discussed and each participant proposed the place, which varied from a corner far from the door to a table. Participants explained that keeping water out of children's reach prevented children from having access to the treated water and not wasting it (7/16). Most households did not have animals, and those who did kept them fenced.

c) SDA, Barriers/Constraints and Solutions

The main barriers/constraints identified by participants during the TIPs and related to water management include the following:

- 20-liter narrow necked jerry can not affordable to a few clients
- Loss of the jerry can and jug's cover
- Access and availability of jug with cover

The only acceptable jug proposed during the negotiation of the SDA on water management was the jug with cover. It is a common practice to use an open jug for hand washing. The open jug should not be used for drawing drinking water from the jerry can.

Additional anticipated barriers/constraints were:

- Limited access to Wuha Agar (availability and distribution in Addis)
- Soap is not always affordable

Table 9 lists of the barriers/constraints and proposed solutions by participants.

Table 9: Barriers/constraints to proper water management and solutions

#	Barriers – Constraints	Proposed solutions
	▪ 20-liter narrow necked jerry can not affordable	Adapt the measure of Wuha Agar to the volume of the jerry can available at home. Involve the participant in income generating activity to enable to buy the 20-liter jerry can
	▪ Loss of jerry can and jug cover	Teach how to attach the cover to the jerry can or the jug with a string
	▪ Access and availability of jug with cover	Increase access to income generating activities to increase access to jug with cover
	▪ Limited access to of Wuha Agar (Addis)	------
	▪ Soap is not always affordable	Increase access to income generating activities to increase access to soap

After six weeks, the data collectors visited each participant enlisted in improving water management to discuss the practices they have adopted.

d) Adopted SDA

Box 4 shows the SDA that have continuously been implemented. Participants said they have adopted the SDA.

Box 4: Adopted Water Management SDAs

1. Drinking water container
- Reserve a 20-liter jerry can with cover for drinking water (24/25)

2. Drinking water treatment at the point of use
- Treat drinking water with Wuha Agar (30/30)

3. Drawing drinking water from the 20-liter jerry can
- Pour water from the jerry can into a clean jug with cover (13/14)
- Pour drinking water from jerry can directly into a clean cup or glass (9/9)

4. Place the clean glass/cup upside down on a clean place (20/20)

5. Place the jerry can out reach of children and animals (14/16)

Almost all the negotiated water management SDAs had been consistently implemented for six weeks. Participants planned to continue implementing these SDAs. Participants switched from time to time from using the clean jug to using the clean glass to pour drinking water from the jerry can. Either SDA is good. The lack of space in the room/house was the major constraint preventing participants from placing the jerry can out of the reach of children.

Another indication that the SDA was adopted was the fact that some participants took the initiative to encourage other people in the same compound or neighborhood to practice the SDA. The proportion of participants who encouraged people to practice the SDA is shown in box 5 below.

Box 5: Proportion of Participants Who Encouraged Others to Practice the SDA

- Reserving a 20-liter jerry can for drinking water (5/24)
- Treating drinking water with Wuha Agar (5/30)
- Pouring drinking water into a clean jug (4/9)
- Pouring drinking water into a clean glass/cup (3/13)
- Place the clean cup/glass upside down on a clean surface (8/20)
- Place the jerry can out of reach of children and animals (4/14)

4.2.2 Feces Management

a) SDA Already Being Implemented and Practices to Improve

During the first TIPs visit, the data collectors explored participants' feces management practices. Table 10 summarizes feces management practices already being implemented and the practices to be improved.

Table 10: Summary of SDA related to feces management already being implemented and practices to improve

SDA being implemented	Practices to improve
▪ Use of latrine and the potty mostly in urban and peri-urban settings ▪ Disposal of the feces from the potty most of the time in the latrine	▪ Defecation in open field mostly in rural area ▪ Feces from the potty and from the plastic bag dumped into open fields in rural area and in drainage ditch in urban area ▪ Potty washed most of the time only with water after disposing of the feces ▪ Hand washing with water only most of the time after defecation or washing the potty; for a good number, no hand washing at all

The results highlight the SDA participants without a latrine tried and the SDA that participants with a latrine tried as well as the motivations and perceived benefits. The negotiated SDA focused mostly on having and using a latrine. The assumption is that if a latrine is available, feces from the potty will be disposed of in the latrine.

b) SDA Tried and Motivations and Perceived Benefits Are Listed in Table 11

Table 11: SDA tried and motivations and perceived benefits

SDA tried	# people who tried it	Motivation and perceived benefits
Constructing and using an Ecosan latrine		
▪ Construct and start using an Ecosan latrine	18/18	Proud to have my own latrine and cease going to neighbors to ask to let me use their latrine (10/18). Have a pleasing living compound with no flies; with open defecation my compound was full of flies. My children can play everywhere without walking on feces (8/18).
▪ Construct a superstructure (wall and roof) for the Ecosan	16/18	Protects me from being seen by people when I defecate during daytime.
Participants with existing latrine		
▪ Construct a superstructure	2	Use the latrine anytime. Do not feel embarrassed using the latrine during daytime (2/2).
For participants with latrine (Ecosan or existing latrines)		
▪ Put ash into the latrine after defecation	14	Ash is easy to find. Ash removes the bad odor and chases away flies (14/14).
▪ Wash the potty with water and ash	2	Ash is easy to access and is not costly. Ash cleans the potty very well (2/2).
▪ Wash the potty with soap and water (soap available)	2	Soap cleans the potty very well and the potty becomes “inviting” to use.
▪ Put ash in the potty before defecation	2	Feces easy to remove from the potty
▪ Wash hands with water and soap or ash after disposing of the feces from the potty	2	Washing hands with soap helps removed contamination (2/2).
▪ Wash hands with water and soap or ash after using the latrine	9	My hands will not contaminate my food.

- *Access to latrines—constructing or using the existing latrine*

Access to latrines was approached/addressed differently in rural and urban settings.

In rural settings, participants own their house and the land. The data collectors negotiated with all who did not have a latrine to construct one using one of the two options proposed: either a traditional latrine or an Ecosan latrine. Appendix # 2 describes both latrines. Each participant chose the type of latrine s/he liked most. The data collectors asked the participant to prepare the spot, dig the hole, and make an appointment in 2-3 days after the hole was dug. Before the next visit, arrangements

were also made with the NGO supporting the home-based program to supply the participant with a slab as per the guidelines.

In urban and peri-urban settings, participants were encouraged to use the existing latrine.

- *Constructing and using an Ecosan latrine*

All participants who agreed to construct a latrine chose the Ecosan latrine. Within two days most participants dug the hole and a few had already started to build the superstructure (wall and roof). The Ecosan latrine was extremely well received. The Ecosan latrine is easy to construct; it requires a hole that is 1m deep and 40 cm in diameter. The slab molded to cover the hole and used for squatting is 60 by 60 cm.

The perceived benefits of the Ecosan latrine included:

- Pride in having one's own latrine and the ability to stop requesting to use the neighbors' latrine (10/18).
- Feeling comfortable and pleased to live in a compound with no flies, which was perceived to be cleaner.

- *Superstructure for the Ecosan and for existing latrine*

Over a three-week period, 16 of 18 participants who constructed an Ecosan latrine completed the accompanying superstructure. Two participants with existing latrines also constructed a superstructure. The main stated perceived benefit from having the superstructure was greater privacy. People cannot be seen defecating during daytime, so they can use the latrine at any time.

- *Putting ash in the latrine after defecation*

Most participants put ash into the latrine after defecation because ash is easy to find and ash removes the bad smell and chases flies away (14/14).

- *Hands washing after using the latrine*

Most participants who agreed to implement this SDA did so and said it helps prevent the food from being contaminated.

- *Using the potty—putting the ash in the potty before defecation*

This SDA was well received and practiced with satisfaction. Participants said ash helps remove feces easily from the potty.

- *Washing the potty with water and ash or soap after disposing of the feces*

Participants who had soap were encouraged to wash the potty with water and soap after disposing of the feces. Participants who did so said the potty became very clean and "inviting/attractive to be used." Participants who did not have soap used ash as advised. They said ash is easy to access because it is cheap and ash also cleans the potty very well.

- *Washing hands with water and soap or ash after disposing of the feces from the potty*

Participants who practiced this SDA said it helps prevent hands from being contaminated.

- *Put a tin to collect used tissue paper*

Putting paper inside the latrine delays the disintegration of feces and contributes to filling the latrine quickly. Participants who put a tin to collect used paper said used paper will not be dispersed all over the living area.

- *Washing hands with water and soap or ash after disposing of the feces from the potty or after using the latrine*

These SDA were very well received and the perceived benefit was to help remove contamination and prevent contamination of the food.

c) SDA, Barriers/Constraints, and Proposed Solutions

The main barriers and constraints for implementing feces management are related mostly to the limited access to infrastructure and materials and include the following:

- *Limited access to latrines in urban settings*. Some participants could not pay the fees to use a latrine. They either defecate in the potty or in plastic bags, then dump the feces and plastic bag into the drainage ditch.

- *No appropriate place to dispose of the feces from the potty and the plastic bag*; therefore, feces are dumped in open fields and in drainage ditches.

- *Cannot afford to construct a superstructure for the Ecosan latrine* because the local materials are costly. Participants found it more important to have a wall than a roof on the latrine.

The proposed solutions are listed in table 12.

Table 12: **Proposed solutions for the identified barriers**

Identify barriers and constraints	**Proposed solution**
Limited access to latrines in urban settings	Increase access to income generating activities
No appropriate place to dispose of the feces from the potty and the plastic bag	----
Cannot afford the construction of superstructure	Construct an Ecosan latrine under a tree for the branches to provide shade

d) Adopted Small Doable Actions

Participants were visited after six weeks and the proportion that had continued implementing the SDA is listed in the box below.

Box 6: Feces Management Adopted SDA

1. Infrastructure/equipment for proper disposal of feces

- Construct and use an Ecosan latrine (18/18)
- Construct a complete superstructure from local materials for Ecosan (16/18)

- Construct a superstructure for the existing latrine (2/2)
- Put ash into the latrine after defecation (6/18)
- Put ash in the potty before use (2/2)
- Put the used paper in a tin (3/4)

2. After defecation

- Wash the potty with water and soap (2/2) with water and ash (2/2)
- Wash hands with water and soap or ash after disposing of the feces from the potty (2/2) or after using the latrine, or cleaning the baby's bottom

Apart from putting ash in the latrine after defecation and putting the used paper in a tin, most SDA were adopted and had continued to be implemented after six weeks by participants enlisted in the feces management trial. Some participants satisfied with the outcomes of the SDA encouraged their neighbors to practice the SDA as well, as shown in the box below.

Box 7: Proportion of Participants Who Encouraged Others to Practice Feces Management SDA

- Construct and use Ecosan latrine (7/18)
- Put ash in the latrine to get rid of flies (6/6)
- Put the used paper in a tin (3/3)
- Wash hands after using the latrine (2/9)

The following section summarizes the TIPs conclusions and recommendations.

V. CONCLUSIONS AND RECOMMENDATIONS

The conclusions are drawn for each behavior explored and or tried during the TIPs and address the following points:

- Feasible SDA
- Key perceived benefits
- How to address the constraints to make the SDA feasible for most PLWHA

5.1 Conclusions

5.1.1 Water Management

a) Feasible Small Doable Water Management Actions

Box 8 summarizes the feasible small doable water management actions generated from the TIPs.

Box 8: Feasible Small Doable Water Management Actions

1. Drinking water container
- Reserve a 20- liter covered jerry can for drinking water

2. Drinking water treatment
- Treat drinking water with Wuha Agar

3. Drawing drinking water from the container
- Pour water from jerry can directly into a clean cup or glass

or pour water from jerry can into a clean jug and then, pour in a clean cup or glass
- Wash the jug with cover with water and soap every day
- Keep the jerry can and jug covered during day and nighttime
- Put the clean cup and glass upside down on a clean tray on a shelf or a table

4. Store the jerry can out of the reach of animals and children

b) Key Perceived Benefits and Motivations

Table 13 summarizes the key benefits and motivations generated in the three- and six-week follow-up visits.

Table 13: Feasible SDA and motivations and benefits evoked

#	Feasible SDA	Key benefits/motivations
1.	**Reserve a 20-liter jerry can for drinking water**	▪ Convenient to fetch water ▪ Narrow neck and cover prevents contamination ▪ Prevents children from dipping hands in the water
2.	**Treat drinking water with Wuha Agar**	▪ Good taste ▪ Free from germs ▪ Water clear and appealing to drink
3.	**Drawing drinking water from the container**	
	▪ Pour water from jerry can directly into a clean cup or glass	▪ Attractive to drink ▪ Check if drinking water is clean or not ▪ Satisfaction when drinking water from a clean glass
	▪ **or** pour water from jerry can into a clean jug and then pour in a clean cup or glass	▪ Reduces wasting water and water spillage
	▪ Wash the jug with cover with water and soap every day	▪ Prevents contamination
	▪ Keep the jerry can and jug covered during day and nighttime	▪ Prevents contamination

	▪ Put the clean cup and glass upside down on a clean tray on a shelf or a table	▪ Prevents contamination from dust and dirt ▪ Glass and cup always found clean
4.	**Store the jerry can out of the reach of animals and children**	▪ Limits children's access to treated water ▪ Limits possibility of contamination and of wasting water

c) Addressing the Barriers and Constraints to Make the SDA Feasible for Most PLWHA

This section highlights the solutions proposed by the participants to make the SDA feasible for most PLWHA.

Limited Access to 20-Liter Jerry Can

Providing access to income generating activities and including a 20-liter jerry can in the home-based care package were the proposed solutions to address the limited access to 20-liter jerry cans.

The following section presents and examines the proposed solutions by PLWHA enrolled in the water management trials.

- *Enroll eligible PLWHA in income generating activities*

The average cost of a 20-liter jerry can is 25 birr (25 cents). Enrolling eligible PLWHA in income generating activities will enable them to get money to buy a 20-liter jerry can. The enrollment into income generating activities will depend on the availability of such a program/service in the NGO supporting home-based care activities or on the existence and provision of such a program/service by another NGO in the same area. Prior to enrolling in the program, accessing/acquiring a 20-liter jerry should be discussed, communicated, and agreed upon with each participant as a priority. Selection criteria should also be developed to help identify PLWHA who need the service most.

- *Adjust the amount of Wuha Agar to the size of the available jerry can*

This solution has been proposed by a few participants who could not afford to buy a jerry can. The challenge in implementing this solution is the ability or the limited capacity of home-based workers to accurately measure the amount of Wuha Agar to be used to effectively treat the amount of water contained in various sizes of jerry can. It is almost impossible to ensure that this type of adjustment will be properly done. If the proper amount of Wuha Agar needed to treat water is not used, drinking water is not safe. Therefore, the proposed solution should be discarded.

- *Include a 20-liter jerry can in the home-based care package*

The limitation of this solution is that it requires a funding source. Therefore, this solution should be envisaged only under specific conditions and as an exceptional measure i.e., if the participant does not have a 20-liter jerry can at home, cannot afford to buy one, and/or is on ART and is too weak to embark in income generating activities.

Access to Wuha Agar

The two main barriers/constraints that could jeopardize the effectiveness of the treatment of drinking water are:

- Limited access to Wuha Agar
- Discontinuity in the use of Wuha Agar

Ensuring access to Wuha Agar and its continuous use are required to ensure that drinking water remains safe.

- *Ensure continued access to Wuha Agar*

A few participants enlisted in the water management trials had been given Wuha Agar in the past with their supply of antiretrovirals. These participants were to be informed where to get or buy Wuha Agar from. A good number of NGOs supporting home-based care programs have or are envisaging including Wuha Agar in the home-based care package. Long term solutions should be envisaged, and Wuha Agar should be available in every community.

- *Use Wuha Agar continuously to treat drinking water*

A few participants who had previously been supplied with Wuha Agar with their antiretrovirals were not informed that they should use Wuha Agar continuously. Since it is not possible to ensure that drinking water containers and covers will always be properly washed and the drinking water poured into the jerry can always is safe, treating drinking water in the container with Wuha Agar is required and is the only way to ensure that drinking water remains safe. Therefore, the use of Wuha Agar should never be discontinued. Programs should sensitize PLWHA about the importance and need to always treat drinking water with Wuha Agar in order to enjoy the health benefits.

Drawing Water from the Jerry Can

The two feasible SDA for this behavior are either drawing water from the jerry can and pouring it in the glass or cup or drawing the water from the jerry can and pouring it in a clean jug and then pouring the water into a glass or cup. The only acceptable jug is the jug with a cover. Moreover, the jug and the cover should be washed with water and soap every day. The most commonly used jug is the jug without cover. The jug without cover is used for hand washing. Therefore, when this SDA is negotiated, access to a jug with cover and the availability of soap are the prerequisites. If a jug with cover and soap are not available, the PLWHA should be encouraged to use a clean glass or cup directly to draw water.

Covering the Jerry Can—Attaching the Cover to the Container

A good number of jerry cans observed during the first TIPs visit did not have a cover. During the follow up visits, all the participants enlisted in the improving water management trial had a cover on the jerry can containing drinking water. The SDA was very well received. A few participants suggested tying a string on the cover and the neck of the jerry can to avoid losing the cover or keeping it off the ground.

Washing the Jug and Cover and the Availability of Soap

It is extremely important to wash the jug and the cover properly with water and soap to prevent contamination of the drinking water in the jug. If soap is not always available, PLWHA should be encouraged to use a clean glass to draw water from the jerry can.

5.1.2 Feces Management

The following sections will highlight the most feasible SDA, the perceived benefits, and the solutions and recommendations to make the SDA feasible for most PLWHA.

a) Feasible Small Doable Feces Management Actions

The feasible SDA generated during the TIPs are listed in box 9.

Box 9: Urban and Rural Areas: Day and Nighttime

1. Infrastructure/equipment for proper disposal of feces

- Construct a latrine with a superstructure from local materials—use latrine and or the potty, and/or plastic bag for all family members
- Put ash into the latrine after defecation to prevent flies and bad smell.
- Put ash/sand in the potty before use
- Put the used paper in a tin
- Dispose of the feces in the potty in the latrine immediately after use

2. After defecation

- Wash the potty with water, soap, or ash
- Place the potty out of the reach of children
- Wash hands with water and soap or ash after disposing of the feces from the potty or after using the latrine, or cleaning the baby's bottom

b) Key Perceived Benefits and Motivations

Perceived benefits stated by participants were related mostly to preserving dignity, ensuring the protection of children and a clean environment, and practical advantages such as the ease of making the infrastructure (latrines) or of removing the feces from the potty.

Key perceived benefits and motivations evoked by participants from constructing and using the Ecosan latrine with a superstructure included the following:

- Ecosan is easy to construct
- Using a latrine ensures privacy and preserves dignity
- Environment is free of feces and safe for children to play

Putting the ash in the latrine after defecation was effective in preventing bad smell and flies. Putting ash in the potty before defecation was very convenient because it helped to easily remove the feces from the potty. Putting the used paper in a tin was found very convenient because soiled pieces of paper were not spread around the compound. According to participants in the TIPs, washing the potty with ash was found very effective and made the potty very clean.

c) Addressing the Barriers and Constraints to Make the SDA Feasible for Most PLWHA

This section presents the changes proposed by the participants enlisted in the feces management trials to make the SDA feasible for most PLWHA and also discusses the limitations of a few proposed solutions.

Access to the Latrine and/or to Infrastructure for Safe Disposal of the Feces

In rural areas, easy access to land was an important factor that led to the construction and use of the Ecosan latrine. However, in urban areas, since most people rent their

room/house, they have to pay to have access to the community latrine. Inability to pay the fees limits the use of the latrine. Two solutions were proposed to address this barrier:

- Increase access to income generating activities to enable participants to pay for the fees for using the latrine
- Construct infrastructure or make available appropriate materials/equipment such as “special type of trash can” for the safe disposal of the feces from the potty or the plastic bag

Increasing access to income generating activities depends on the availability of this program and service in the area. The use of plastic bags and the potty was most prevalent in Addis. No appropriate infrastructure was available for the safe disposal of the feces from the potty and the plastic bag. This is a gap that programs and policy makers should address.

Stigma Associated with HIV/AIDS

In one instance in an urban area, one participant household was not allowed to use the landlord-owned latrine to dispose of the feces from the potty because of the landlord’s and his family’s fear of contracting HIV. This isolated occurrence was a reminder that stigma associated with HIV/AIDS is still present and education/sensitization of the general population on the need to live with and support PLWHA should go hand in hand with enhancing feces management for PLWHA.

Limitations Associated with the Use of the Ecosan Latrine

Although the construction of the Ecosan latrine was very well received, this SDA is associated with a few limitations that programs should be aware of and discuss with clients/participants in order to find solutions.

The Ecosan is easy to dig, however, its lifespan is limited. Every time an Ecosan latrine is built, the superstructure has to be rebuilt as well. The short lifespan of the Ecosan may push PLWHA to discontinue the use of the latrine. Ensuring privacy and dignity was an important perceived benefit of using the latrine. To have to build a new superstructure every time an Ecosan latrine is constructed may be a major constraint for the continued use of the latrine. Programs should address this limitation to ensure PLWHA continuously use the latrine. Solutions to this limitation should be context specific and could include using available and cheap material for the construction of the superstructure, therefore, making it affordable.

5.2 Recommendations

This section will present the recommended SDA for proper feces management, water management, and hand washing, and hygiene during menstruation taking into consideration the findings of the rapid assessment carried out in Bahir Dar (Amhara National Regional State) and the TIPs carried out in Oromo region. The recommended SDA are the SDA that were found acceptable and feasible by PLWHA in Bahir Dar, Addis, Adama, Alemtena, and Wonji.

5.2.1 Water Management

The recommended SDA are listed in box 10 below.

Box 10: Water Management—Small Doable Actions
Urban and Rural Areas

1. Drinking water source and container

- Reserve a 20-liter jerry can or clay pot (ensera) with a proper cover for drinking water.
- Attach the cover to the ensera or jerry can using a string to keep it off the floor.
- Treat drinking water contained in the 20-liter jerry can or clay pot (ensera) with Wuha Agar.
- Use narrow mouth 20-liter jerry can or clay pot (ensera) with a cover to store drinking water.

2. Serving drinking water

- Pour water from jerry can or ensera into a clean cup or glass OR pour into a clean jug with cover and then pour into a clean glass. If a jug is used, the jug should have a cover and be reserved for serving drinking water only. When drawing water, don't put hands in the water.
- Wash jug and its cover with soap and water every day.

3. Keep drinking water safe and jug and glass/cup clean

- Keep the jerry can, clay pot (ensera), and jug covered during day and nighttime.
- Put the clean cup and glass upside down on a clean tray on a shelf or a table.
- Store the jerry can or clay pot (ensera) out of the reach of animals and children.

The major difference in the water management practices in Oromo and Amhara regions is the use of clay pot (ensera) to store drinking water in Amhara Region. The rapid assessment carried out in Bahir Dar revealed that drinking was stored most of the time in a dirty clay pot (ensera).

The use of the clay pot (ensera) to store drinking water poses a certain number of challenges to be aware of and to work with PLWHA to find appropriate solutions to. These challenges include the following:

- *The clay pot comes in various sizes*

The size of the clay pot is not standardized. This poses a challenge for water treatment with Wuha Agar. It is important to train the PLWHA how to fill the clay pot (ensera) with 20 liters of water using another available utensil which size/volume is known. For example, if the size of the jug is 5 liters, the PLWHA will have to put four full jugs of water in the clay pot (ensera) to make 20 liters. Then the PLWHA can proceed with water treatment with Wuha Agar.

- *The clay pot does not come with a cover*

It is important to discuss with PLWHA and identify a proper cover available at home. Demonstrate how to attach the cover to the jerry can with a string to keep the cover off the ground. The main criteria for selecting the cover for the clay pot (ensera) is the ability/capacity to cover the entire mouth of the clay pot so that the excess of chlorine in Wuha Agar remains in the pot to ensure that water is being protected from contamination.

5.2.2 Feces Management

The list of the most feasible feces management SDA from the TIPs in Oromo and Amhara regions are listed in box 11 below.

Box 11: Feces Management—Small Doable Actions
Day and Nighttime—Urban and Rural Areas

1. Infrastructure/equipment for proper disposal of feces

- If latrine is not available, construct an Ecosan latrine with superstructure (walls) from local materials.
- Use latrine and/or the potty and/or plastic bag for all family members.
- Put a handful of ash in the latrine after defecation (to get rid of the smell and the flies).
- Put ash/sand in potty before use.
- Immediately dispose of the feces in the potty or plastic bag in the latrine or trashcan.
- Put used paper in a tin.

2. After defecation

- Wash the potty with water and soap, ash or sand.
- Place potty out of the reach of children.
- Wash hands with water and soap or ash after disposing of the feces from the potty or after using the latrine, cleaning a baby's or anyone's bottom, or when tending to a patient.

Feces management practices are similar in both Oromo and Amhara regions, but vary according to the setting. In rural areas where open defecation is common, the most feasible SDA is to construct and use an Ecosan latrine. In urban areas, community or landlord-owned latrines are available; however, two main barriers/constraints can prevent PLWHA from using the latrines. These barriers and the proposed solutions are:

- *Limited access to the latrine due to inability to pay the user fees*

Although the user fees are very low, around 6 – 12 birr, some PLWHA cannot afford to pay. Solutions to this problem include either (i) increasing access to income generating activities to enable PLWHA and their families to pay, and/or (ii) making available suitable equipment (special trashcan) to dispose of feces from the potty or plastic bag.

- *Limited access to latrine due to stigma*

Sometimes, stigma can also prevent PLWHA from using the landlord-owned latrine. Some people still believe that HIV can be transmitted through contact with the feces of PLWHA. Anti-stigma sensitization and education of the general population on HIV transmission should accompany strengthening the integration of WASH in HIV programs.

5.2.3 Diarrhea Management for Bed-Bound PLWHA

Diarrhea management for mobile PLWHA is similar to diarrhea management for any adult, and the recommended SDA are the same as proper feces management practices. The rapid assessment carried out in Bahir Dar revealed that the reported diarrhea

management practices for bed-bound PLWHA were good and reflected the messages conveyed by home- based case workers. Therefore, it was not necessary to carry out any trial on these practices during the TIPs.

Bed-Bound symptomatic PLWHA suffer from bouts of diarrhea that should be managed properly to reduce the incidence of diarrhea among household members, especially children. The SDA for diarrhea management for bed-bound PLWHA are listed in box 12 below.

Box 12: Small Doable Actions for Managing Diarrhea of Bed-Bound PLWHA

1. Sleeping pattern practices of bedridden PLWHA

- Caregivers should spread a plastic sheet (or cut open plastic bags) across the part of the bed under the buttocks and completely cover the plastic with a piece of cloth. (Have several pieces of cloth available for use so when one is soiled it can be immediately replaced with another. These can be made from old skirts, dresses, or bed sheets.)

2. Care for bed-bound PLWHA suffering from diarrhea

- Caregivers should use gloves when caring for PLWHA suffering from diarrhea.
- Caregivers should wash feces stained/soiled cloth, bed sheets, and clothes of the sick person with water and soap and dry them in the sun.
- Caregivers should always wash hands with water and soap after caring for PLWHA suffering from diarrhea.

3. PLWHA is alone

- If PLWHA is alone and very weak, after defecating, roll over and reposition; lean on the side while waiting for someone to help.

The availability of materials such as pieces of cloth for the bed, a mat, mattress, plastic sheeting to cover the mattress or mat with, soap, and water are required for proper management of diarrhea in bed-bound PLWHA. Caregivers should always wear gloves when caring for PLWHA suffering from diarrhea.

5.2.4 Hand Washing

The SDA listed in box 13 below emanate from the rapid assessment carried out in Bahir Dar.

Box 13: Hand Washing—Small Doable Actions—Urban and Rural Areas

- Make and use a tippy tap for hand washing. If necessary, build a tippy tap next to the bed to make it easy for PLWHA to wash. Place a bucket below the tippy tap to catch the water.
- Wash hands with soap or ash, rub hands together at least 10 times, attending to the “forgotten spots” like under the nails, between the fingers, to the wrists. Dry in the air. Don’t let the water pour while rubbing to save water.
- Wash hands properly with water and soap or ash before meals and cooking, after using the toilet, after cleaning baby’s bottom, before and after attending to the

patient, whenever going near dung, and after cleaning the potty.

- If you come into contact with blood, feces, urine, or vomit while attending to the patient, wash your hands immediately after cleaning these up; do not wait.

The rapid assessment in Bahir Dar revealed that the main barriers/constraints to proper hand washing include the availability of soap and the knowledge of critical times for hand washing. Programs should help PLWHA address these barriers and constraints. Proposed solutions include the following:

- *Availability of soap*

PLWHA who don't have soap, should use ash for hand washing. PLWHA in Bahir Dar said that they know that ash is good for hand washing, but they have been so accustomed to use soap that they did not remember about using ash.

- *Sensitization and education on critical times for hand washing*

PLWHA wash their hands often, but not always at critical times. Caregivers should sensitize and educate PLWHA about the importance of hand washing at critical times.

5.2.5 Menstrual Management Practices for PLWHA

The assessment of hygiene practices during menstruation revealed that the reported practices were the same in all areas and settings. The reported practices were also very good. Box 14 below lists the SDA for menstrual management practices that emerged from female TIPs participants.

Box 14: Menstrual Management Practices—Urban and Rural Areas

1. Protection during menstruation

- Use a clean piece of cloth (linen or cotton material) or a clean pad.
- Store the used piece of cloth in a plastic bag during daytime to prevent contact with the blood-stained material.

2. Hygiene during menstruation

- Dispose of the used pad in the latrine or in the trashcan.

3. Washing the cloth

- Wash the used piece of cloth with soap and water at night. (Caregivers should wear gloves to protect their hands.)
- Dry on the line/hang at night and collect early in the morning.
- Keep the clean and dry pieces of cloth in a clean box after menstruation.

3. Cleaning the stained dress/bed sheet

- Remove the dress, linen/bed sheet and wash with soap and water.
- Dry the dress, bed sheet/linen outside the house under the sun.

Observing hygiene practices during menstruation was not possible during the TIPs. However, the similarity and the consistency in reported practices led us to conclude that the reported practices reflect actual behaviors.

Although the knowledge of the risk of HIV transmission by coming into contact with menstrual blood was very high among women in urban areas, the knowledge of this risk was very low and almost nonexistent among women in rural area.

Box 15: Recommendations

- PLWHA and their families should be sensitized to the risk of HIV transmission associated with contact with menstrual blood.
- Caregivers should always wear gloves when caring for PLWHA to avoid direct contact with body fluids such as blood.

The following section highlights the implications for programs and policies in order to strengthen WASH into HIV program in Ethiopia.

VI. IMPLICATIONS FOR POLICIES AND PROGRAMS

6.1 Policy Implications

The TIPs findings have policy implications within and beyond HIV programs. The TIPs targeted PWLHA registered in NGO home-based care programs in the Oromo Region and included people living in extreme poverty.

6.1.1 Improve WASH Guidance for the Poorest of the Poor

The TIPs findings shed light on the feasible WASH SDA for the least fortunate and the poorest of the poor who have inadequate WASH practices and high morbidity and mortality from diarrheal diseases. However, public health interventions have difficulty reaching this group. The TIPs findings can inform WASH guidelines for the poorest of the poor, irrespective of their HIV status, by suggesting small doable actions households can take to improve their WASH practices. This should lead to reduced morbidity and mortality from diarrheal diseases among the poorest of the poor and among PLWHA and their families.

6.1.2 Develop Policy and Guidelines

Increased evidence has demonstrated the benefits of improved WASH practices in reducing the incidence of diarrhea episodes and improving the quality of the life of PLWHA and their families. Building on this evidence, policy makers should acknowledge the importance of improved WASH practices for PLWHA and include WASH small doable actions in national HIV policy guidelines.

The policy document should identify which HIV programs would benefit from WASH integration, including prevention, care and support, treatment, OVC, and PMTCT. For each type of program the national guidelines should articulate the most appropriate products, materials, and services needed to help PLWHA and their families improve their WASH practices. This will require cross-sectoral coordination between the WASH sector and HIV programs and services at national, regional, and community levels. Cross-

coordination between the HIV and WASH sectors should help to fill the gaps such as the lack of appropriate equipment for proper feces disposal for PLWHA and their families using potties or plastic bags.

Water and sanitation policies should also take into consideration the special needs of specific groups such as weak, symptomatic PLWHA. These policies should aim to reduce the incidence of diarrhea in the household by enabling/promoting appropriate feces management infrastructure for sick and weak people, including PLWHA.

6.2 Implications for HIV Programs

6.2.1 Develop Guidelines to Integrate WASH into Home-Based Care Programs

The TIPs findings highlight issues such as key behaviors and small doable actions, and types of WASH products, materials, and hardware required.

a) Develop a Behavior Change Strategy to Improve WASH Practices at the Household Level

The three key behaviors needing improvement to reduce the incidence of diarrhea in PLWHA and their families are:

- Hand washing
- Water management
- Feces management

A fourth behavior, *menstrual management*, is needed to reduce the risk of HIV transmission through the contact with menstrual blood. The TIPs revealed that while current practices are good, rural inhabitants are unaware of the transmission risk. Thus, the knowledge and perception of this risk needs to be improved significantly.

- *Targets*

Two main groups should be targeted for improved WASH practices:

- o PLWHA and their families are the primary target audience for all four behaviors.
- o Caregivers working with PLWHA and their families, especially home-based care workers 1) to be the primary dissemination channel to share information and to model good WASH practices with their clients; 2) to reduce the caregivers' risk of diarrheal disease and to a lesser extent, risk of HIV transmission.

- *Messages*

The TIPs can be used to develop WASH messages for each behavior. Messages should be action-oriented and clearly state for each target group, the small doable action and the benefits/motivations as identified by the TIPs.

- *IEC/BCC materials*

The TIPs research can inform IEC material development such as counseling cards and job aids to help improve the communication with PLWHA and their families and motivate them to act by implementing the WASH SDA.

- *WASH equipment and materials*

The availability of WASH equipment and materials is critical for PLWHA and their families to implement small doable actions. The TIPs highlighted the most acceptable and available WASH equipment and materials for each behavior targeted. Refer to table 14 below.

Table 14: **List of equipment and materials required to implement the WASH SDA**

#	**Behavior**	**Equipment, materials, and products**
1.	Water management	20-liter jerry can with cover attached with a string, jug with cover attached with a string, cup or glass, Wuha Agar, water and soap
2.	Feces management	Slab, local material for the wall and the roof, potty, plastic bag, tin to collect used paper, water, ash or soap
3.	Hand washing	Tippy tap, water, ash, sand, or soap,
4	Menstruation management	Clean pieces of cloth or pad, water, and soap

The TIPs findings highlight the hardware (e.g., latrines, products, and materials) PLWHA are willing to acquire and use to improve WASH practices.

Water treatment at the point of use is the only way to ensure that water consumed by PLWHA and their families is safe. Continuous access to a water treatment product is required for PLWHA even in areas with treated tap water.

Governments, NGOs, and donor programs need a coordinated effort to design and implement a comprehensive system to improve access to locally available and effective hygiene and sanitary systems, materials, and products such as the Ecosan latrine, tippy tap, soap, ash, sand, and water containers.

- *Strengthen the capacity of home-based care workers, providers, and their supervisors*

Although the TIPs research highlighted the most feasible SDA for each key behavior, WASH practices vary according to the setting, household, and purchasing power of each PLWHA. Building the capacity of PLWHA caregivers and their supervisors is critical to ensure the most feasible SDA is promoted. Therefore, caregivers and their supervisors must obtain the skills/competencies to assess current WASH practices effectively and to negotiate the improved SDA while considering which resources are available. The box below is an illustrative list of skills/competencies that caregivers and their supervisors must master.

Box 16: Skills/Competencies Required for Caregivers to Help PLWHA Improve WASH Practices

- Ability to contact, interact, and engage PLWHA in discussing current WASH practices
- Ability to assess current WASH practices, identify practice to be improved, and determine available options for improving the practice
- Ability to acknowledge and compliment clients on the good practices being implemented
- Ability to negotiate the SDA options, address barriers and constraints, and empower the PLWHA to make an informed choice
- Ability to encourage and support the PLWHA to implement each SDA chosen

- *Include HIV-WASH activities in the supervision checklist*

After training caregivers and their supervisors, the supervisors must encourage and support caregivers to use the new skills/competencies to negotiate improved WASH SDA with PLWHA and their families.

Program planners should include the activities for promoting WASH SDA in the supervision checklist to allow the supervisors to monitor progress and oversee/support appropriate negotiation and behavior change. The supervision report should inform program managers on the implementation status of WASH-HIV activities.

6.2.2. Strengthen Monitoring and Evaluation of WASH Activities in HIV Programs

Program planners and managers should include indicators such as the number of WASH activities (i.e., individual negotiation on WASH SDA) carried out, the number of PLWHA and their families reached. The information generated will help monitor the implementation to improve WASH practices. This tool can be used to help revise planning or make decisions.

Measuring key practices among PLWHA and their families before program implementation and at regular points in time will indicate how WASH practices are improving among PLWHA.

6.2.3 Develop Language for Other HIV Prevention Care and Treatment Programs to Use to Integrate WASH into their Programs

The language will be similar to the guidelines developed for home-based care programs and will focus on the same behaviors, SDA, WASH products and materials. However, the aim of this action will be to help programs identify entry points in which to integrate WASH actions within the different HIV programs. A few differences might include the type and level of staff involved in providing the service and experience in negotiating improved practices.

6.2.4 Strengthen WASH Practices in the Community through Community Mobilization

Diarrhea affects everyone, and providing WASH guidance only for PLWHA and their families has been known to promote stigma. Therefore, all community members should be sensitized to improve their own WASH practices.

6.2.5 Use Social Mobilization to Support PLWHA and their Families to Implement WASH SDA

The support of community leaders and champions will help PLWHA improve their WASH practices and further strengthen community will and involvement in small doable actions for WASH.

6.3 HIV Considerations for the WASH Sector

Water, sanitation, and hygiene small doable actions identified in the TIPs are the same for all irrespective of HIV status**.** However, there are some situations where very weak and sick people have specific WASH needs that should be taken into consideration. For example, very weak and sick people need something to hold onto, such as a pole or a rope, to support them when using the latrine. The special WASH needs of sick and weak people should be identified and taken into consideration when addressing the WASH needs of the community.

APPENDIX

Tools Used during the TIPs

PART I: FIRST WEEK'S VISITS

The team of two researchers will visit each participant twice during the first week.

The objectives of the first week are to:

First visit

- Establish good contact with the participant, identify him/her, and collect background information
- Assess the current practices: ask and observe current water and feces management practices; if the participant is a young woman, discuss hygiene during menstruation
- Review the information collected and identify the good practices to maintain and practices to be improved **and** the relevant/appropriate small doable actions to be tried by each participant/household
- Select the behavior to be improved and the small doable actions, negotiate, and ask the participant to choose or to agree on the set of small doable actions/options s/he and his/her household will try

Second visit: 2 – 4 days

- Assess the level of recall of the messages on the small doable actions s/he was to try
- Help address constraints
- Make appointment for the follow-up visit in three weeks

First visit

A. CONTACT AND INTRODUCTION

1. Identification of the participant

This section will be filled out before meeting with the participant.
Respondent # _____

Date of the first visit_____

Name of the city/village_____

Type of setting: urban, peri-urban, rural – *Circle the respondent's answer*

Name of the respondent (head of household living with HIV/AIDS) _____

On ART? Yes, No - *Circle the respondent's answer*

Ownership of the house – Owned – Rented
Circle the respondent's answer

2. Introduction and greetings

The home-based care visitor from the area does the greetings and introduces the other team members. The name of my team members are:

_____
S/he or they work for the home-based care program in_____

The other team member continues the conversation

We would like to talk/discuss with you about water and sanitation practices in your household. The information you will give us will remain confidential and will be used to help improve the services that we are providing to PLWHA and to community members. Before discussing about water and sanitation practices, we would like to know a little more information about you and your household.

How long have been living in this house?
_____

What is your matrimonial status: married, divorced, widowed, and other (specify) _____
Circle the respondent's answer

Do you have children? Yes, No - *Circle the respondent's answer*

If yes, how many living children do you have? _____

What is their age? _____/ _____/ _____/ _____/ _____/ _____/_____/

How many people live in this house? _____

What do you do for living? _____

If married and live with the partner, ask: what does your partner do for living? _____

B. ASSESSMENT OF CURRENT PRACTICES

1. Water treatment

Source of water

Where do you get your drinking water from? _____

If you buy water, how many jerry cans/buckets/ensera do you buy - on average daily? _____

Water storage

Where do you store your drinking water? Can you show me? Observe the following:

Type of container
Bucket, jerry can, ensera, others (specify)_____
Circle the type of container used

Container covered: Yes, No *Circle the respondent's answer*

Describe the type of cover used_____

Properly covered: Yes, No - *Circle the respondent's answer*

Drawing water from the drinking water container

Ask the participant to demonstrate how s/he draws drinking water and gives to any person. ***Observe the following***:

If the drinking water is contained in a bucket, or ensera –
What did s/he use to draw water with? Ladle, cup, jug, glass, or others, specify _____ *Circle the instrument used to draw water with*

Did s/he dip his/her hands in the water? Yes, No – *Circle the response*

Pouring water

If the water container is a jerry can or small ensera, – did s/he pour? Yes, No – *Circle the correct response*

What did she/h pour drinking water into? Uncovered jug, covered jug, glass/cup, and others specify_____- *Circle the utensil used*

Cleanliness of utensil (jug, cup, glass…) used to serve drink water

The drinking water was poured into a clean jug/cup/glass or dirty jug/cup/glass, others (specify) _____*Circle the correct answer*

Serving drinking water
The drinking water was **served** into: cup, glass, tin, others, specify_____ *Circle the utensil used*

Cover the container after serving the water
Did s/he cover the container after drawing the water? Yes, No - *Circle the correct answer*

Storing the ladle and the cup
a. S/he stored the ladle in a clean place - Yes, No - *Circle the correct answer*

b. S/he stored the cup/glass in a clean place – Yes, No - *Circle the correct answer*

c. S/he stored the jug in a clean place – Yes, No - *Circle the correct answer*

Drinking water container is out of the reach of children – Yes, No - *Circle the correct answer*

Drinking water container is out of the reach of animals – Yes, No - *Circle the correct answer*

If the items/materials listed below are **not** used for water management, ***find out/identify what is available in the house or can be bought to replace*:**

To cover the container of drinking water_____

To serve as ladle_____

To serve as cup or glass for drinking water_____

Other items /materials that would be useful for water management_____

To serve as an appropriate hanger for the ladle and cup_____

2. Feces management

Type of latrine in the compound

Shared latrine, privately owned latrine, no latrine, or other (specify) _____ *Circle the respondent's answer*

Defecation during daytime
Where do you defecate during daytime? Latrine, popo, plastic bag, open defecation, or other (specify) _____ *– Circle the respondent's answer*

Ask the participant to show the latrine and or the popo: *Latrine or popo available- Circle what is available*

a. If the participant does not use latrine, ask why? Latrine unisex – latrine smell bad – no wall or see through – uncomfortable – other (specify) _____ - *Circle the respondent's answer*

b. Do you pay a fee to use the latrine? Yes, No - *Circle the respondent's answer*

c. If potty or plastic bag mentioned, ask: where do you dispose of the feces? Latrine, bury it, garbage can, other (specify) _____ *Circle the respondent's answer*

d. What do you do after disposing of the feces and/or after defecation?

d1: Wash the potty with water, wash potty with soap and water, other (specify) _____ *Circle the respondent's answer*

d2: Wash hands with water, wash hands with soap and water, nothing, other (specify) _____ *Circle the respondent's answer*

Where do men (if the participant is a woman and vice versa) defecate during daytime? Latrine, potty, plastic bag, open defecation, other (specify) _____ *Circle the respondent's answer*

Where do the following people defecate?

- Children <3 - Potty, latrine, open defecation
  Other (specify) _____*Circle the respondent's answer*

- Sick adult bedridden - potty, latrine, open defecation
  Other (specify) _____*Circle the respondent's answer*

a. **(For adult bedridden people &/or children less than 3 years old)** If potty, or plastic mentioned, ask: where do you dispose of the feces? Latrine, bury it, garbage can, other (specify) _____ *Circle the respondent's answer*

If the potty is mentioned, where do you dispose of the feces from the potty? Latrine, garbage can, other (specify) _____ *Circle the respondent's answer*

What do you do after disposing of the feces?

a: Wash the potty with water, wash potty with soap and water, other (specify) _____ *Circle the respondent's answer*

b: Wash hands with water, wash hands with soap and water, nothing, other (specify) _____ *Circle the respondent's answer*

c. Do you have soap at home? Yes, No*: Circle the respondent's answer*

If yes can you show me? Soap available, soap not available: *Circle the respondent's answer*

Defecation at night

Where do you defecate at night? Latrine, potty, plastic bag, open defecation, or other (specify) _____
– *Circle the respondent's answer*

Where do the following people defecate at night?

- Children <3 - potty, latrine, open defecation
  other (specify) _____*Circle the respondent's answer*

- Adult bedridden: potty, latrine, open defecation
  other (specify) _____*Circle the respondent's answer*

(For bedridden adult &/or children less than 3 years old) If potty, or plastic is mentioned, ask: where do you dispose of the feces? Latrine, bury it, garbage can, other (specify) _____ *Circle the respondent's answer*

End the interview and observation here if the interviewee is a man.
Thank the participant for his answers.

Explain to the participant that the team will take half an hour outside to review the information collected then you will come to have a final discussion with him/her.

3. **Hygiene during menstruation**
To be explored with young women only - (The female researcher alone will conduct this discussion. The male researcher will wait outside.)

I would like to discuss with you a sensitive topic. I would like to talk with you about menstruation.

Do you have your menstruation? Yes, No - *Circle the respondent's answer*

How often do you have them? Every month, every other month, once every six months, once a year *Circle the respondent's answer* other (specify) _____

What do you use to protect yourself when you have your menstruation? Piece of cloth, pad, other (specify) _____*Circle the respondent's answer*

Where do you dispose of the blood stained cloth/material? Latrine, wash and dry, other (specify) _____ *Circle the respondent's answer*

If you wash and dry it:

a. How do you wash it? Water and soap, water, other (specify) _____ *Circle the respondent's answer*

b. Where do you dry the material?
_____

If your cloth/dress is stained with blood, what do you do with the stained cloth/dress?
_____

If your bed sheet/linen is stained with blood, what do you do with the stained sheet/linen?
_____

If the mattress is stained with blood, what do you do with the mattress?
_____

hat do you think will happen to somebody who comes in contact with the blood from menstruation? _____

Thank the participant for her answers.

Explain to the participant that you will take half an hour outside to review the information collected then you will come to have a final discussion with her.

C. REVIEW THE INFORMATION COLLECTED: IDENTIFY THE GOOD PRACTICES AND PRACTICES TO IMPROVE

Carry out this review outside of the house, not in presence of the participant

a) Use table 2 below and compare the actual practices with the small doable actions for each area to:

- Identify the small doable actions that are being implemented
- Identify the practices to be improved
- Select the behavior and the small doable actions to help improve the behavior
- Negotiate the small doable actions

Table 1: Practices being implemented and practices to be improved and the small doable actions/options to present

Behaviors and small doable actions (SDA)	SDA being implemented (Yes, No)	Practice to be improved and SDA/ options	SDA/options Presented and negotiated
1. Water management			
1.1 Container reserved/assigned for drinking water			
1.2 Water treatment **(*)**			
1.3 Drinking water container covered			
▪ Container properly covered			
1.4 Drawing water from the container			
1.4.1 Use a ladle			
1.4.2 Hands in contact with water when drawing water			
1.4.3 Pouring water from the container (jerry can or ensera) into a clean and covered jug			
1.4.4 Pouring water from the container (jerry can or ensera) into a clean cup/glass			
1.5 Clean cup or glass used for drinking water			
1.6 Container covered after drawing water			
1.7 Ladle/jug kept clean			
1.7.1 Ladle/jug hung on a nail			
1.7.2 Ladle/jug stored in a clean and covered utensil/pot			
1.7.3 Jug put upside down on a clean shelf			
1.8 Cup/glass kept clean			
1.8.1 Cup/glass hung on a nail			
1.8.2 Cup/glass stored in a covered and clean utensil/pot			
1.8.3 Cup/glass put upside down on a clean shelf			
1.9 Drinking water container out of reach of children			
1.10 Drinking water container out of reach of animals			
2. Feces management			
During daytime			
2.1 Adults			
2.1.1 Where do you defecate?			
a. Latrine			
b. Popo			

c. Open defecation			Construct a latrine or a potty
d. Plastic bag			
e. Neither latrine, nor potty (women)			Construct a latrine or a potty
2.1.2 Proper disposal of the feces in the potty or plastic bag			
2.1.3 Wash the potty with water and soap after disposing of the feces			
2.1.4 Wash hands properly with water and soap after washing the potty			
2.1.5 Put sand or ash in the potty before use **(*)**			
2.1.6 Put ash in the latrine after use to prevent flies **(*)**			
2.2 Where do sick people/bedridden defecate?			
a. Latrine			
b. Potty			
c. Plastic bag			
2.2.1 Where do children < 3 defecate?			
a. Latrine			
b. Potty			
c. Plastic bag			
2.2.2 Proper disposal of the feces in the plastic bag or the potty			
2.2.3 Washing the potty with water and soap or ash			
2.2.4 Wash hands with water and soap or ash after disposing of feces/after defecation			
2.2.5 Availability of soap			
Defecation at night			
2.3 Adults (men and women**)**			
a. Latrine			
b. Potty			
c. Plastic bag			
d. Open defecation			Construct a latrine or a potty
e. Other (Specify)			
2.4 Sick people bedridden			
a. Latrine			
b. Potty			
c. Plastic bag			
d. Other (specify)			
2.5 Children < 3			
a. Latrine			
b. Potty			
c. Plastic bag			

d. Other (specify)			
2.5.1 Proper disposal of the feces in the potty or plastic bag			
2.5.2 Washing the potty with water and soap or ash after disposing of the feces			
2.5.3 Wash hands with water and soap or ash, after washing the potty			
3. Hygiene during menstruation			
For women having their menstruations			
3.1 Material used for protection			
a. Clean piece of cloth			
b. Pad			
c. Other_____			
3.2 Disposal of the stained pad			
a. Latrine			
b. Garbage can			
c. Burn it			
3.3 Disposal of the stained piece of cloth			
a. Wash with water and soap and dry on the line (at night or daytime)			
3.4 Cloth/dress stained with blood			
a. Wash it with soap and water and dry on the line			
3.5 Linen/bed sheet stained			
a. Wash with soap and water and dry			
3.6 Mattress stained with blood			
a. Wash with soap and water and dry			

(*) New behaviors to be presented to all participants

b) From the table above, report the SDA the participant is already implementing in the table below.

Table 2: SDA already being implemented

#	**Behaviors/areas**	**Small doable actions being implemented**
1.	Water management	
2.	Feces management	
3.	Hygiene during menstruation	

c) Select a behavior to be improved and the small doable actions to help improve this behavior and fill out the middle column of the table below.

For the behavior “hygiene during menstruation,” select only women who have their menstruation regularly (every 4-6 weeks).

Table 3: Behavior and SDA actions to be presented and negotiated

Behavior:	**Small doable actions**	**Small doable actions the participant agreed to try**

d) Make an appointment to visit in the next 2 – 4 days.

Date (next visit) _____ **Time:**_____

D. VISIT IN 2 – 4 DAYS

1. Before the visit, transcribe the behavior to be improved and small doable actions to be tried in one of the tables below.
2. During the visit:
   - Make good contact and greetings
   - Ask the participant to state the behavior and the small doable actions he agreed to implement. Tell him or her the SDA that s/he skipped if that's the case.
   - If the participant implemented all the small doable actions, find out if s/he had problems and help address the constraints/problems
   - If the participant did not implement the small doable actions, find out why and if necessary, discuss the changes to be made to make the small doable actions feasible
   - Make an appointment for the follow-up visit in three weeks

Table 4: Small doable actions being implemented and proposed changes

<table>
<tr><td colspan="3">Behavior:</td></tr>
<tr><td>Small doable actions the participant agreed to implement</td><td>Small doable actions not implemented and proposed changes</td><td>Small doable actions (including the changes) renegotiated with the participant</td></tr>
<tr><td rowspan="2"></td><td>SDA not implemented and constraints</td><td rowspan="2"></td></tr>
<tr><td>Proposed/negotiated changes</td></tr>
</table>

Three week follow up date:_____

PART II: THREE WEEK FOLLOW-UP VISIT

Three weeks after the second visit, the researcher will visit each participant. The purpose of the visit is to gather information on the benefits of implementing the SDA and to help address the constraints encountered by each participant.

1. Objectives of the three week follow-up visit are to:

- Gather information on the SDA to be implemented by each participant
- Collect information on the benefits (motivations) for implementing the SDA
- Discuss and help address the constraints
- Collect the participants' suggestions on the recommendations to make the SDA feasible

2. Procedure

a. Before the three week follow-up visit, read carefully the form filled out for each participant during the first and second visit. Become familiar with the content and the information generated during the first week (1st and 2nd visit)
b. Make a good contact with each participant and ask to talk to the participant alone (without visitors and family members around)
c. Fill out the three week follow-up visit form. Record the information generated on the form
d. Make an appointment for the six week follow-up visit
e. Thank the participant

3. Steps

f. Ask the participant to restate the SDA he chose to implement during the second visit
g. Compare the participant's response with the form filled out during the second visit
h. If the participant skipped/missed an SDA, find out if it is an omission or a deliberate decision to drop the SDA
i. Discuss the reasons for dropping the SDA and help identify the solutions to address the constraints
j. Ask the participant to list/explain the reasons/benefits that have motivated him to continue to implement the SDA
k. Ask the participant to suggest modification or change for each SDA to make it more feasible

THREE WEEK FOLLOW-UP VISIT

1. Identification of the participant

This section will be filled out before the meeting with the participant.

Name of the respondent/participant _____

Date of the visit_____

Name of the city/village_____

Type of setting: urban, peri-urban, rural – *Circle the appropriate response*

2. Introduction and greetings

Greet the participant and explain that the purpose of the visit is to assess how the implementation of the small doable action is going.

3. Implementation of the small doable actions

Behavior to be improved:			
SDA agreed upon from the second visit	*Ask: What are the SDA you chose to implement (One SDA per box)*	SDA that were not mentioned	Gather information on: ▪ Reasons for omitting/dropping the SDA ▪ For each SDA difficult to implement, discuss and identify the solutions & changes to make it feasible
1.			
2.			
3.			
4.			
5.			
6.			

4. Benefits & motivations for implementing the small doable actions

Small doable actions that were implemented (from the table above)	Benefits and motivations for implementing the SDA (Write the quotes from the participant)
1.	
2.	
3.	
4.	

5. SDA for the six week follow up

SDA already being implemented	Modified SDA (with the changes/solutions)
1.	1.
2.	2.
3.	3.

6. Date for six week follow-up visit: _____

PART III: SIX WEEK FOLLOW-UP VISIT

Six weeks after the first rounds of visits that led to the agreement on the SDA to be implemented by the participant, the researcher will visit each participant to assess the level of adoption of the SDA and the modifications to be made to make the SDA more feasible by most people/households.

1. Objectives of the six week follow-up visit are to:

- Assess the level of adoption of each SDA
- Collect information on (i) participants perceived benefits (motivations) for implementing the SDA and (ii) the suggested changes to make the SDA feasible by most PLWHA.

2. Procedure

a) Before the six week follow-up visit, read carefully the form of each participant (1^{st}, 2^{nd} visit, and three week follow-up visits). Become familiar with the content
b) During the visit, make a good contact with each participant and ask to talk to the participant alone (without visitors and family members around)
c) Fill out the six week follow-up visit form. Record the information generated on the form
Thank the participant and answer any question he or she may have

3. Steps

d) Ask the participant to restate the chosen SDA.
e) Compare the participant's response with the form filled out during the second visit and three-week visit
f) If the participant skipped/missed an SDA, find out if it is an omission or a deliberate decision to drop the SDA
g) Discuss the reasons for dropping the SDA and help identify the solutions to address the constraints
h) Ask the participant to suggest the modifications or changes for each SDA to make it feasible for most PLWHA
i) Ask the participant to list/explain the reasons/benefits that have motivated him to continue to implement the SDA

SIX WEEK FOLLOW-UP VISIT

1. Identification of the participant

This section will be filled out before the meeting with the participant.

Name of the respondent/participant _____

Date of the visit_____

Name of the city/village_____

Type of setting: urban, peri-urban, rural – *Circle the appropriate response*

2. Introduction and greetings

Greet the participant and explain that the purpose of the visit is to discuss the SDA.

3. Implementing the small doable actions

Behavior to be improved:			
SDA agreed upon from the second visit	*Ask: What are the SDA you chose to implement (One SDA per box)*	SDA that were not mentioned and SDA difficult to implement	Gather information on: ▪ Reasons for omitting the SDA ▪ Suggestions to make the SDA more feasible for most people/households
1.			
2.			
3.			
4.			
5.			
6.			

4. Benefits & motivations for sustaining/continuing to implement the small doable action

Small doable actions implemented (from the table above)	**Benefits and motivations** ▪ What good things have happened to you since you started implementing the SDA? ▪ What do you like about implementing the SDA? Will you encourage somebody else to implement the SDA? If so, why? ▪ What pushes/makes you continue to implement the SDA? **(Write the quotes from the participant)**
1.	
2.	
3.	
4.	

5. Thank the participant and encourage him/her to continue to implement the SDA. Answer any question raised by the participant.