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wsp water and sanitation program

Results from Working at Scale for Better Sanitation and Hygiene in Amhara, Ethiopia: Baseline and Endline Comparisons of Institutional, Household, and School Surveys

This publication was produced for the United States Agency for International Development. It was prepared by the USAID Hygiene Improvement Project, led by the Academy for Educational Development.

The USAID Hygiene Improvement Project (HIP) is a six-year (2004-2010) project funded by the USAID Bureau for Global Health, Office of Health, Infectious Diseases and Nutrition, led by the Academy for Educational Development (contract # GHS-I-00-04-00024-00) in partnership with ARD Inc., the IRC International Water and Sanitation Centre, and the Manoff Group. HIP aims to reduce diarrheal disease prevalence through the promotion of key hygiene improvement practices, such as hand washing with soap, safe disposal of feces, and safe storage and treatment of drinking water at the household level.

April 2011

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Acknowledgments
This document was prepared by Orlando Hernandez, with support from Julia Rosenbaum (both from the USAID Hygiene Improvement Project and AED), and the research firm of Michael Dejene Public Health Consultants. Special thanks to Kebede Faris, Yolande Coombes, and Belete Muluneh from the World Bank Water and Sanitation Program for reviewing the document and to Dr. Asrat Genet, head of the Amhara Regional Health Bureau, for his support of the Learning by Doing Initiative in Amhara, Ethiopia.

Amhara National Regional State
Health Bureau

CONTENTS

ACRONYMS

ADB	African Development Bank
AED	Academy for Educational Development
AIDE	Afro Integrated Development Ethiopia
ARHB	Amhara Regional Health Bureau
BC	Behavior Change
CFT	Community Facilitation Team
CLTBCHS	Community-Led Total Behavior Change in Hygiene and Sanitation
CLTS	Community-Led Total Sanitation
CSPP	Community School Partnership Program
EOC	Ethiopian Orthodox Church
FAO	Food and Agricultural Organization
FINNIDA	Finland International Development Agency
HEP	Health Extension Program
HEW	Health Extension Worker
HIP	Hygiene Improvement Project
HWTS	Household Water Treatment and Storage
IFHP	Integrated Family Health Project
KWC	Kebele WASH Committee
MDG	Millennium Development Goals
M&E	Monitoring and Evaluation
NGO	Nongovernmental Organization
ODF	Open Defecation Free

ORDA	Organization for the Relief and Development of Amhara
Oxfam GB	Oxfam Great Britain
PTA	Parent Teacher Association
RWASH	Rural Water, Sanitation and Hygiene
SIDA	Swedish International Development Agency
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCHW	Volunteer Community Health Workers
WASH	Water, Sanitation, and Hygiene
WIG	District Investment Grant (World Bank Grant)
WSP	Water and Sanitation Program
WSR	Whole System in the Room
WWT	Woreda WASH Team

INTRODUCTION

This report presents the comparisons between the baseline and endline findings from the evaluation of the Learning by Doing Initiative that the Amhara Regional Health Bureau (ARHB) implemented with participation of the Amhara Regional Education Bureau and dozens of district and local government and NGO partners. The World Bank administered Water and Sanitation Program in Africa (WSP-AF) and the USAID-funded Hygiene Improvement Project (HIP) jointly supported and implemented the program in the Amhara region of Ethiopia. Results presented here reflect comparisons of data collected in May 2008 and June 2010. The report presents findings for three different initiative components: institutional, household, and school program assessments. The presentation of findings is preceded by a background and methodology section. The final section discusses programmatic implications and measurement suggestions for similar studies that may be conducted in the future.

Summary of Findings

At the institutional level the baseline and endline comparison detected more coordinated planning within the public sector agencies involved in hygiene and sanitation and between the public and the private sectors. By the time data were collected at the endline each of the high intensity districts (those targeted with the most program funding and support) had established teams to coordinate and oversee water, sanitation, and hygiene activities at the local level. In comparison, low intensity districts showed little evidence of team building and a general lack of coordination in their work plan development and implementation.

At the household level substantial gains in sanitation coverage were recorded, and they could be linked to components of the behavior change strategy implemented by the intervention—social mobilization and household negotiation techniques. Based on an analysis of endline data, the chances of owning a latrine were about 11 times higher in households located in villages that organized a walk of shame (part of the community-led total sanitation approach), that were visited by an outreach worker to improve sanitation conditions, and where child caretakers held beliefs that reflected motivational factors promoted by the initiative (e.g., having a latrine contributes to the their community's health or development). Despite significant drops in open defecation (a 24 percent decrease), families are upgrading to unimproved sanitation facilities rather than the improved latrines promoted by the project, which meet minimum Millennium Development Goal standards.

Knowledge about hand washing junctures crucial to reduce diarrheal disease increased significantly, but promoting the practice remains a challenge. Many more people are apt to wash their hands for food handling purposes rather than for reasons related to fecal matter.

While self-reported hand washing practices have increased significantly, this is not substantiated by the presence of hand washing stations with needed supplies. Spot checks indicated a 3 percent (not statistically significant) drop in the presence of both water and soap from baseline to endline. The relative number of hand washing stations near latrines remained static (17% at the baseline and 16% at the endline), and thus not statistically significant.

Considerable gains were observed regarding the adoption of water treatment at the household level (from 8 percent at baseline to 36 percent). Use of WaterGuard chlorine solution—marketed locally as *Wuha Agar*—to treat water, a practice the project promoted, increased 18 points. Changes regarding appropriate household storage of drinking water seem to be going in the right direction, even if they are more limited.

An examination of school-related data indicates a greater need for infrastructure expansion. The ratio of students per defecation squat hole continues to be very high and above national standards. While increases were recorded in the presence of hand washing stations near latrines as well as with availability of water and soap, the overall numbers are very low. Only 21 percent of visited schools had hand washing stations, and only half of those had any hand washing supplies present. Considerable increases were recorded in the cleanliness of latrines and in the availability of more private facilities. The role of hygiene clubs and PTAs in encouraging infrastructure upkeep is promising.

Background

The Learning by Doing Approach to At-Scale Implementation of the National Hygiene and Sanitation Strategy in Amhara, also referred to as Community-Led Total Behavior Change in Hygiene and Sanitation (CLTBCHS), is an official program of the Amhara Regional State Bureaus of Health and Education. It was technically supported by two institutions: 1) the Academy for Educational Development (AED), and its partners, through the USAID-funded Hygiene Improvement Project, and 2) the World Bank's Water and Sanitation Program. In the rest of the document this program will be referred to as the Learning by Doing Initiative, CLTBCHS, or simply the partnership.

USAID's Hygiene Improvement Project aimed to reduce diarrheal disease prevalence and improve child survival through the sustainable improvements in three key hygiene behaviors: hand washing with soap, safe feces disposal, and safe storage and treatment of drinking water at the household level. HIP worked at scale in Ethiopia and Madagascar (rather than starting as a pilot and working toward scale-up), and from October 2004 to November 2010, provided technical support to hygiene improvement programming in Ethiopia, Madagascar, Nepal, Uganda, and Peru. In all of its programs, HIP supported the integration of hygiene improvement into other health platforms such as HIV/AIDS and other infectious diseases, as well non-health

platforms such as schools. HIP also helped develop consumer approaches and private sector partnerships to increase the availability and demand for low-cost sanitation options, as well as ensure effectiveness and sustainability of use. Further information on USAID/HIP can be found at www.hip.watsan.net.

WSP is an independent unit within the Department of Energy, Water and Transport in the Sustainable Development Network vice presidency of the World Bank. WSP works directly with client governments at the local and national level in 27 countries through four regional offices and in the World Bank headquarters, Washington, DC. WSP's aim is to achieve the Millennium Development Goals (MDGs) of halving the proportion of people without access to safe drinking water and adequate sanitation by 2015.

For almost 30 years, WSP has led or supported many of the advances made within the water and sanitation sector. The program has been able to share best practices across regions and place a strong focus on capacity building by forming partnerships with nongovernmental organizations, governments at all levels, community organizations, private industry, and donors. WSP's work helps to effect the regulatory and structural changes needed for broad water and sanitation sector reform. In the specific case of Ethiopia, several WSP initiatives exist to coordinate efforts in the federal WASH sector to achieve MDG targets and to facilitate the implementation of the Hygiene and Sanitation Strategy in Amhara. Further information about WSP may be found at http://www.wsp.org.

WSP-USAID/HIP in Ethiopia

The partnership helped to implement the Government of Ethiopia's National Hygiene and Sanitation Strategy. Through a learning by doing approach in the Amhara region the partnership built capacity within the regional, district, NGO, and private commercial sectors to improve planning, budgeting, and implementation of hygiene and sanitation improvement to support national commitments to achieve universal sanitation coverage by 2012. The partnership's Learning by Doing Initiative was embraced by the National Regional State of Amhara as part of the Health Extension Program (HEP) and as their official approach to achieving goals of universal hygiene and sanitation. The HEP targets rural families, seeks to involve communities and to use local technologies and wisdom, focusing on the improvement of prevention skills and behaviors within the household, and involves fewer facility-based services.[1] Activities targeting households and communities were referred to in the region as Community-Led Total Behavior Change in Hygiene and Sanitation. CLTBCHS also included a focus on school water, sanitation, and hygiene (WASH). This component (known as WASH-friendly schools) helped to ensure the existence of essential water and sanitation facilities

[1] Health Extension Program in Ethiopia: Profile. (2007) Health Extension and Education Center, Federal Ministry of Health, Addis Ababa, Ethiopia. Available at: http://www.ethiopia.gov.et/English/MOH/Resources/Documents/HEW%20profile%20Final%2008%2007.pdf

within schools, the integration of hygiene and sanitation promotion into school curricular and club activities, and the encouragement of school to community outreach to improve household and community WASH practices. In addition, the partnership supported the creation of a WASH Resource Center in the Amhara Regional Health Bureau to foster information and experience sharing among the many partners working in sanitation and hygiene in the region and elsewhere. Lastly, the partnership supported a national initiative to integrate hand washing, sanitation, and safe water practices into home-based and palliative care for people living with HIV and AIDS. This initiative is building the evidence base and developing concrete programming guidance and tools at a national and global level.

WSP/HIP/Amhara Health Bureau Learning by Doing Approach

The WSP/HIP/Amhara Health Bureau Learning by Doing Initiative was implemented in the Amhara Regional State, one of nine regional states in Ethiopia. It has a population of over 17 million (figures range between 17 and 20 million depending on the source) in an area of about 153 kilometers square with a population density of 93.5 /km^2.[2] The state has 11 zones and 151 urban and rural districts or *woredas*. The districts are further divided into 3,115 rural and 322 urban subdistricts or *kebeles*.[3] These subdistricts are further subdivided into sub-subdistricts or *gotts* (villages), which is the lowest level in the rural structure.

The region has appreciable health infrastructure and trained human health power. One such resource is the health extension workers (HEWs) who are trained subdistrict level health workers. By mid-2010, about 6,000 HEWs were assigned in all subdistricts in the region. These resources are embedded in the maternal and child health program and serve as important hygiene and sanitation change agents in the rural communities of Amhara, dedicating their efforts to 16 packages or topics of the "family health card," seven of which focus specifically on environmental health, sanitation, and hygiene. The list of all topics may be found in Box 1.

The Learning by Doing Initiative targeting households in the general population was conceptualized with these major objectives in mind**:**

- Support the implementation of the National Hygiene and Sanitation Strategy through the learning by doing approach in Amhara to help the Regional Health Bureau achieve its hygiene and sanitation goals of universal practice of hygiene and sanitation by 2012.

- Refine and document a model that may be adapted for immediate application in other Ethiopian regions.

[2] Amhara National Regional State Health Bureau Profile, October 2007
[3] Bureau of Finance and Economic Development, 2008

In October 2006 HIP/WSP held a multistakeholder forum that brought together over 95 key stakeholders from a wide range of sectors to identify a common vision and action agenda and develop a coordinated work plan to greatly increase access to improved sanitation and hygiene in Amhara on a large scale. This multisectoral effort was a first for the safe water and sanitation sectors in Ethiopia and provided a solid foundation and momentum on which to build. To support the action agenda, WSP/HIP/Amhara Health Bureau worked with the regional and district partners to develop guidance for hygiene and sanitation improvement at scale, which drew from several behavior change (BC) approaches catalyzing change at the household, community, and institutional levels.

Box 1: Components of Health Extension Package

Disease Prevention and Control

- HIV/AIDS and other sexually transmitted infections (STIs) and TB prevention and control
- Malaria prevention and control
- First aid emergency measure

Family Health

- Maternal health
- Child health
- Family planning
- Immunization
- Nutrition
- Adolescent reproductive health

Hygiene and Environmental Sanitation

- Excreta disposal
- Solid and liquid waste disposal
- Water supply and safety measures
- Food hygiene and safety measures
- Healthy home environment
- Control of insects and rodents
- Personal hygiene

WSP/HIP used a hygiene and sanitation improvement approach that combines community mobilization with the principles and procedures outlined in community-led total sanitation (CLTS).

It complemented these efforts with a household negotiation approach, which was integrated into the health outreach program. HEWs visited households as part of their routine family visits to help families follow through on their commitment to end open defecation and determine which sanitation option best suited their needs. Part of this comprehensive approach included identifying and popularizing a set of key WASH practices referred to as "small doable actions" that were feasible, effective, and could be implemented on a large scale through the programs of participating partners. The hygiene practices promoted included the hygienic disposal of human feces, hand washing at critical times using the correct technique and supplies, and appropriate household drinking water treatment and storage.

Hygiene and sanitation improvement efforts also involved other outreach agents from participating partners in WASH behavior change activities as well as agricultural extension workers, model farmers, and teachers.

Though the Whole System in the Room (WSR) meeting in October 2006 served as the official "launch," more concerted effort began with the first training of trainers in May 2007. The program in Amhara was implemented for over two and a half years and ended in July 2010.

The Learning by Doing Initiative, because it was a regional at-scale effort, aimed to reach all woredas through a phased approach:

- Four woredas received high intensity training and intensive expatriate and local technical assistance.
- An additional seven woredas received access to tools and focused technical assistance delivered by trained, regional environmental health specialists, who themselves were supported by a regional WSP/HIP advisor.
- The program was implemented under the assumption that one district in each of the 11 zones would serve as the model for the rest of the districts and receive additional institutional development support. Each of the 11 woredas was located in a unique zone and served as the zone's model WASH program. The zonal and focal district staff was expected, in turn, to replicate the institutional development within the zone.

Training materials, job aids, and other supports were developed and modified through learning by doing in the four high intensity districts and distributed to the other districts through the regional environment health cluster leaders (based at the Environmental Health Department of the Regional Health Bureau) and zonal health staff.

Concurrent to the Learning by Doing Initiative, a total of 30 woredas received a special, though limited, stream of WASH funding and assistance through the World Bank/DFID Rural Water and Sanitation Project. As part of the Rural Water and Sanitation Project, districts that successfully elected to budget for hygiene and sanitation activities were encouraged to direct a small 5 percent to 10 percent of their water loan toward broader hygiene and sanitation activities such as CLTBCHS. Another 60 districts received some level of technical assistance and WASH funding from other development partners (Carter Center, UNICEF, or Finnish International Development Agency [FINNIDA]). Thus, about 90 of the approximately 150 woredas received some special attention and/or funding.

Some of these development partners, including WSP, UNICEF, FINIDA, and Carter Center, actively took up the methodology of the new regional hygiene and sanitation program, dedicating their training, support, and in some cases finances to "their" districts. A final monitoring report[4] estimated a total of 44 districts of the 152 in the region were "ignited" for

[4] Faris, K. et al. (2010). At-Scale Hygiene and Sanitation Program in Amhara: Completion Report. WSP, HIP.

total behavior change in hygiene and sanitation, which included follow-up of local outreach workers.

HIP worked with WSP to design a Monitoring & Evaluation Framework to be used by the Learning by Doing Initiative. The rationale for the framework may be found in Annex 1 of this report.

METHODOLOGY

Research Design

The study was based on a stratified sample that represented two different levels of intervention intensity: high and low. Due to financial limitations, no sample was selected from the seven medium intensity woredas. The high intensity stratum was composed of four ignition districts where the Learning by Doing Initiative focused its presence and support. These districts, as described above, received intensive expatriate and local technical support, training, capacity building, and per diem initiative funds for implementation, and served as a materials development and training ground for the rest of the districts in the region. The low intensity stratum was made up of the remaining 148 districts in that region where different partnerships among the Amhara Regional Health Bureau, donors, and/or implementation partners existed to replicate the activities initiated in the four model high intensity districts.

Sampling

All high intensity districts were represented in the sample. The districts in the low intensity group represented the 11 different administrative zones that make up the Amhara region. One low intensity district was randomly selected per zone.

The baseline also included a stratum of intermediate intensity intervention districts where the World Bank/DFID Rural Water and Sanitation Program was focusing water loans, which (as explained earlier) included the limited availability of funds for hygiene and sanitation through routine district budgeting of loan funds and cadres of technical assistance through community facilitation teams (CFTs). That study group disappeared in the endline because implementation proceeded in a different manner than initially conceived—using the CLTBCHS approach became mandatory throughout the region. A total of 22 districts were visited in the baseline, and a total of 14 districts were visited in the endline because the intermediate intervention group was dropped.

Learning by Doing Initiative support to the different strata considered initially in the research design is summarized in the following chart.

Program Inputs Made Available to Different Sampling Strata through the Learning by Doing Initiative

Program Inputs	Strata by Level of Program Intensity		
	High	Intermediate	Low
Expatriate assistance	Provided	Not provided	Not provided
Local TA	Provided	Provided	Not provided
Training	Provided	Unknown	Unknown
Software funding	Provided	Provided	Not provided

Kebeles were randomly selected within chosen districts, and lower administrative regions (gotts) were also chosen randomly within kebeles. In general, a gott is a single village. If not, the largest village in the selected gott was visited. The breakdown of districts and subdistricts visited at both measures are included in Annex 2.

For the institutional analysis, district-level respondents included government officials and program coordinators from health and water offices as well as the rural water, sanitation, and hygiene (RWASH) coordinators. Similarly, a minimum of three people, including subdistrict officials and other members of the subdistrict WASH committee and/or members of the water committees, were selected at the subdistrict level. During the endline, health extension workers were added to the group of individuals interviewed when visiting subdistricts and/or villages, depending on where the health center was located.

For the school analysis, if the gott had only one school, that school was visited and the school principal interviewed. During the baseline, however, if the village had more than one school, a visit was paid to only one school, which was chosen at random from the universe of schools in the gott. During the endline the instructions for school selection were modified to oversample schools, and up to two schools in a given village were visited if they existed.

Households within gotts were selected using a "spin the bottle" procedure. This procedure required selecting a village center, spinning a bottle, and going in the direction the tip of the bottle pointed. Every third household on the street/path was visited until a quota was met. To be included in the household sample, families had to have a child under five.

Sample Size

Sample size calculation for the household survey was based on expected sanitation coverage in Amhara. Based on available Central Statistical Agency data for rural Amhara, it was expected that the sanitation coverage in ignition districts and subdistricts would be equal to 17 percent, and the sample chosen should be able to reflect that same figure. A plus or minus 5 percent precision was tolerated. Homogeneity within cluster was set at 0.4 and the design effect at 3.0.

The household survey was based on cluster sampling. One hundred ten clusters with six households per cluster were chosen per study group. The expectation was to interview 660 households per study group for a total 1,980 household informants. Data were finally collected from 2,000 cases in the baseline given that it included three study groups. The endline sample included 1,378 cases for a total of two study groups. The selection of subdistricts was proportionate to population size.

Selection of Study Participants

The institutional-level assessment targeted the district and subdistrict WASH committee members. Accordingly, the WASH committee chairpersons and/or secretaries who were available in the districts/subdistrict administrative offices during the dates of the survey were approached and interviewed. Health extension workers available at the subdistrict and gott level were also interviewed. Respondents interviewed at the household level were caretakers of children under five years of age.

All formal schools that were located in randomly selected rural subdistricts and that were open on the date of the survey were covered by the school hygiene and sanitation assessment. The principal or vice principal of the visited schools were interviewed for the survey.

Instruments

WSP/HIP drafted structured household questionnaires and semi-structured school questionnaires. These instruments were translated to Amharic, pretested, and adopted to the local situation with collaboration from consultants and experts from WSP/Ethiopia and the Amhara Regional Health Bureau.

In addition, to gather information from members of the WASH committees at the district and subdistrict levels, the research firm Michael Dejene Public Health Consultants developed a key informant interview guide, which the Health Bureau and WSP/HIP reviewed.

Quality Control

The research firm implemented different steps to ensure the quality of the data. They included: appropriate survey instrument design with needed skips and clearly written instructions, adaptation of questions and response categories to local conditions, and the revision of the

completed survey to check for inconsistencies. The process of adapting the survey instruments to the local situation was carried out by experts with many years of experience in the field of water and sanitation and supplemented with pretesting. Adequate emphasis was also placed on the selection and training of the data collectors and supervisors. The supervisors and coordinators carried out close supervision of the data collection process. As part of the supervision process, the coordinators and supervisors spot-checked the completed questionnaires, randomly selected completed questionnaires, and called the respondents to check the consistency of the answers.

Data Analysis

The analysis was conducted by initially exploring differences between the baseline and the endline. Depending on the program component, a comparison between the different sampling strata (high and low intensity) was conducted and may be offered as part of this report. This additional comparison is offered when the data permit it mainly because the strata behaved differently either at each or within each round of measurement. The introductory section to each component will provide further details regarding the type of comparisons presented and the justification behind them.

Limitations of the Study

- The selection of high intensity woredas was not done at random and was based on different programmatic criteria.
- At the baseline, certain aspects of program components had not been fully defined, and the baseline instrument reflected that initial level of clarity. The instrument used at the endline, however, was modified to reflect the new complexities of the activities implemented. As a result, not all variables measured could be tracked over time. This is particularly true in the case of the school component of the program.
- The assessment of the institutional component relied on qualitative research and was conducted mainly through triangulated self reporting involving different sectors and levels of the public sector hierarchy (regional, district, and subdistrict). A more in-depth quantitative approach may provide further insight into the operations of the different institutions involved and may help shed light on the interaction between the institutional and the household components of the program.
- The school sample may not be representative of schools in the districts visited or the region.

RESULTS

Institutional Results

Following the Monitoring & Evaluation (M&E) Plan for the Learning by Doing Initiative prepared jointly by the HIP/WSP partnership, the institutional assessment focused on the following indicators:

- Targeted districts with operational WASH teams
- Joint district WASH plans stimulated by WSRs implemented at the district level
- Targeted districts implementing integrated hygiene and sanitation improvement actions to complement hardware investments
- Trained household visitors/health promoters in targeted districts/subdistricts with access to and applying behavior change and M&E tools introduced via WSP/HIP/Amhara Health Bureau training activities
- Districts reporting progress data

Discussion regarding institutional results focuses on these indicators. Results in this section are discussed by contrasting information obtained at the endline at the high intensity to low intensity districts. This approach was adopted given the few differences that existed between the high and low intensity districts at the baseline as the program at that point was getting off the ground. However, references to the status of indicators at the baseline are added when appropriate.

Operational WASH Teams

At the endline all high intensity districts had operational district level WASH teams, even though in one of the districts the team was formed as late as early 2010. The district level WASH teams, known as the Woreda WASH Team (WWT), were established to oversee the implementation of WASH activities at the subdistrict and gott levels. They are composed of representatives from key public sector institutions, including the district level offices of health, water, education, women's affairs, and finance and economic development.

The water and health offices in the high intensity districts worked closely with the district administration office to coordinate WASH activities when endline data were collected. Either the district water or health offices assumed the leadership role in the district WASH teams. Respondents interviewed argued that the collaboration between different sector offices at the district level facilitated the integrated implementation of both the software and hardware components of the WASH program.

Local and international NGOs and United Nations (UN) agencies continued to provide technical and financial support for the implementation of the WASH program in the four high intensity districts. The list of NGO partners participating in the WASH related activities of the four high intensity districts in the past two years is presented in Table 1.

Table 1: NGOs and Other Partners Participating in WASH Activities in the Four High Intensity Districts

South Achefer	Gonder Zuria	Kewet	Tehuledere
AIDE	World Vision	USAID/CSPP	EOC
UNICEF	ORDA	OXFAM GB	SB/DFID
WB/DFID	SIDA	WB/DFID	WB/DFID
	Save the Children Norway		
	IFHP		
	KFW		
	WB/DFID		

Reports also show that during the past two years kebele/subdistrict WASH committees (KWCs) have been established in most of the subdistricts in high intensity districts. KWCs are often represented by the subdistrict manager, the HEWs, teachers, development agents, agriculture workers, and youth and women representatives.

The baseline assessment indicated that the integrated structure to support WASH activities was just being built. At that time, high intensity woredas were beginning to get needed support to establish a WASH coordinating office, WASH teams, WASH committees, and WASH facilitators. Since then much progress has been detected.

Low Intensity Districts

Except for one district, none of the low intensity districts have a WASH team. As a rule, in practically all low intensity districts where WASH committees are absent, all relevant district level sector offices present their sector specific plan to the district cabinet for approval. The same approach is followed at the subdistrict level. No coordination exists between sectors at

any level related to planning. This lack of coordination is pervasive when it comes to work plan implementation, monitoring, and evaluation of WASH programs at all administrative levels.

It was further reported that, in the majority of the low intensity districts, donor agencies do not actively contribute to the district WASH plan. District offices reported that they often take WASH plans presented by the donors and collaborate with the donors in the implementation of WASH activities that are specific to their domain of intervention.

Similar to what was observed with the high intensity districts, technical and financial support for the implementation of WASH programs are provided by local and international NGOs and donor agencies in the majority of the low intensity districts. The list of NGO partners participating in the WASH related activities of the districts in the past two years is presented in Table 2 below.

Table 2: NGOs and Other Partners Participating in WASH Activities in the Low Intensity Districts

Abergele	Artuma	Lasta	Legambo	Hulet Eju Ense
Goal Ethiopia	ORDA	Plan Ethiopia	SCF-UK	SIDA
	World Vision	ORDA	ORDA	
	USAID/CSPP		USAID/CSPP	
	UNICEF		WASHERA	
			Mekaneyesus Church	
			Kale Hiowt Church	
			Red Cross	
Mneze Mama Midir	**Metema**	**Gunagua**	**Misrak Este**	**Gonge ena Kolela**
ADB	UNICEF	FINNIDA	FINNIDA	FINNIDA

RWASH		WIG/WB	CARE	World Vision
FAO		UNICEF	Carter Center	
			IFHP	

Baseline results suggested that no integrated operational structure existed in low intensity woredas to conduct joint planning of activities.

Joint District WASH Plans

High Intensity Districts

When annual district work plans are prepared in the high intensity districts, all sector offices present their WASH draft plans to the appropriate district level cabinet. At that point, WASH team members review and comment on the draft plan. Actions are integrated and officers in charge may proceed to endorse the collective plan as the district WASH annual work plan. The joint planning process is facilitated by the need to obtain budget allocations from the regional government and the RWASH program. Although this process involves public sector institutions, it does not necessarily include civil society. In fact, the involvement of NGOs and other stakeholders in WASH related planning at the district level is reported to be very limited or nonexistent.

In contrast to what was detected during the baseline assessment, most of the subdistrict level respondents in the high intensity districts reported their involvement in the development of their WASH work plans. The subdistrict administrators indicated at the endline that they often coordinated the planning process for WASH related activities. Similar to what is practiced at the district level, in the WASH planning meetings members of the subdistrict WASH committee present their sector specific plans for discussion, comment, and joint approval. The approved subdistrict WASH plans are often passed to the respective district sector offices for funding.

Many of the interviewees acknowledged the importance of joint planning that takes place at district and subdistrict levels, and indicated that it helped them to monitor and evaluate the implementation of WASH related activities taking place at the subdistrict and gott levels.

The review findings at the endline show that in all subdistricts where WASH programs are ignited representatives of communities were also involved in planning, implementation, and monitoring and evaluation of WASH activities in their respective localities.

These findings, then, paint a very different picture from that detected at the baseline. The baseline assessment had indicated little joint planning at the district and subdistrict levels throughout the high intensity woredas. At the baseline, joint planning was just initiated at the

district level following the introduction of the Rural Water Supply, Sanitation and Hygiene Project programs. At that point, respondents recognized the importance of joint planning even though they were not fully engaged in doing it. Furthermore, at the baseline joint planning at the subdistrict level was never practiced.

Low Intensity Districts

The water, health, and education offices of the majority of the low intensity districts coordinate the implementation of WASH activities that are specific to their sectors. In this regard, the district water office coordinates and often executes the construction of water points, and in collaboration with the subdistrict administration establishes water committees that subsequently follow the operation and maintenance of water points. By the same token, the district health offices and the HEWs working at the subdistrict level are mainly involved in implementing the software aspect of the WASH program and in providing hygiene and sanitation education to community members using different approaches and tools. The district education offices lead and coordinate the implementation of WASH related activities in schools including the construction of latrines and water points and implementation of WASH related education to students.

However, unlike what was observed in the high intensity districts, coordination across sector partners is lacking in the low intensity districts. In this regard, many district officials interviewed were not well aware of the WASH related programs implemented by their counterparts in the WASH sector. Because they work in isolation, some study participants assumed that they were the only institution responsible for the implementation of a specific component of the WASH program.

A lack of coordination also existed between the hardware and software components of WASH programs. Explaining this lack of integration, an official from a district health office from one of the control districts said:

> *Since the hardware component of the program is not our mandate, we do not have adequate information about the number and types of water points constructed in our district, but from what I know the awareness creation and behavioral change components of the WASH program is going well and in this regard we are making a difference in the community.*

Absence of an established mechanism to coordinate the joint planning and monitoring and evaluation exercise at the district level; lack of experience and skill on how to carry out the joint planning; and a shortage of trained manpower and finances as well as a lack of commitment from the different partners were the major problems mentioned by representatives of the

district level sector offices for the absence of joint planning for WASH activities in the majority of the control districts.

At the baseline, no joint planning activities between WASH sector stakeholders had been detected in low intensity woredas, even though some joint planning occurred within the health sector. Absence of joint planning at that point was explained by making reference to a lack of institutional support for joint planning and a lack of awareness of the importance of the practice.

Integrated Hygiene and Sanitation Improvement Software Actions to Complement Hardware Investments

High Intensity Districts

In the high involvement districts hygiene and sanitation promotion at the community level addressed hand and face washing, safe disposal of household and animal waste, use of latrines, treatment of drinking water, and proper and safe handling of water, including the use of narrow mouth containers to fetch and store water.

In these districts CLTS was adopted as an approach to ensure the realization of a high level of hygiene and sanitation behavior change at the village level. The approach has been more frequently used in subdistricts that received training and other technical support from the Learning by Doing Initiative. In fact, subdistricts that received financial and close technical support from the district WASH team have worked to try to achieve 100 percent latrine and clean water coverage and have adopted CLTS to achieve their targets.

Home visits are among the key approaches employed by the HEWs and volunteer community health workers to improve community members' uptake of hygiene and sanitation practices. During home visits, community members become acquainted with how model households build and use latrines, handle drinking water safely, separate and pen animals, and so forth.

Almost all subdistrict level respondents reported that HEWs supported by volunteer community health workers played a key role in the implementation of WASH related activities, including constructing household latrines, educating the community on personal and environmental hygiene, latrine use, hand washing, and safe handling of water.

Subdistrict WASH committees also played an active role in mobilizing the community for hygiene and sanitation activities. In this regard, the subdistrict WASH committees in collaboration with the gott level water committees (and supported by community volunteers) organized mass hygiene and sanitation education for members of the community. Different events including community and religious gatherings and regular subdistrict meetings were the common platforms used for mass education of the community about different WASH issues.

These events elicit the support of the community members for the hygiene and sanitation interventions. Gott level water committees also organized to coordinate and mobilize the community for the construction, maintenance, and administration of water points.

All the four high intensity districts reported that WSP financially supported the formation of a technical support team, which is known as a Community Facilitation Teams. CFTs are composed of a minimum of three professionals working as community mobilizers, construction supervisors, and hygiene and sanitation workers. The CFTs report to the WWT and link the activities of the subdistrict WASH committee with the WWT. CFTs train subdistrict and gott level water committees and pump attendants to manage water points. They also work hand in hand with the HEWs and volunteer community health workers (VCHWs) on hygiene and sanitation issues.

At the time of the endline review, there were two CFTs in Gonder Zuria and Tehuledere and one operating in South Achefer. The CFT formed in Kewet District was reported to have worked only for about four months and to have been replaced by staff from the district water and health offices.

According to the district level respondents, CFTs operate mainly in selected subdistricts and support subdistrict WASH committees to implement the WASH work plan. Despite the pivotal role CFTs play in the implementation of WASH activities at the district and subdistrict levels, they only focus on certain districts and corresponding gotts. For example, there is evidence that CFTs operate in eight of the 18 subdistricts in South Achefer and in six of the 18 in Kewet, yet in 28 of the 35 subdistricts located in Gonder Zuria. This finding may be related to the fact that the World Bank's program operates only in certain districts.

According to people interviewed from different levels, the involvement of the community representatives with other stakeholders at all levels of the project cycle helped to ensure the full engagement of the community in different activities. These included mobilizing the community for hygiene and sanitation related awareness raising activities, making different types of contributions for water point construction, selecting sites where new water points would be constructed, maintaining water pumps, constructing latrines, and monitoring the construction of water points and latrines.

At the baseline, perspectives differed about the integration of hardware and software issues. Water sector representatives argued in favor of an integration of hardware and software activities. Software issues were addressed then in terms of garnering community support and involvement for the construction and operation of water schemes. Health extension workers, however, had a different view of what constituted software activities, pointing out that there

was no promotion of water handling practices to encourage families to maintain the quality of water obtained from an improved source.

Low Intensity Districts

In all low intensity districts, the implementation of the software component of the WASH program is handled as part of the implementation of the health extension program. In this regard, the HEWs assisted by volunteer community workers carry out hygiene and sanitation education at the community level. These are part of their regular activities and include house-to-house visits. Hygiene promotion activities also include model households and model farmers. In some of the low intensity districts visited CLTS was adopted by some of their partner NGOs like Save the Children UK and ORDA as an approach for the implementation of WASH activities. The use of CLTS was limited to subdistricts covered by these donor agencies.

In most low intensity districts, the implementation of the hardware components of the WASH program is mainly coordinated and carried out by technical people who are contracted or assigned to carry out the construction of water points and communal latrines. Almost always, the constructed water points are managed by the water committees that are composed of community representatives. The water committees often take the responsibility for the administration, cleanliness, and maintenance of the water points.

Similar to what they do during the implementation of the WASH program at the household level, HEWs in the low intensity districts actively participate in informing students about hygiene and sanitation issues. However, unlike high intensity districts, community level involvement of members of the water committees in hygiene and sanitation promotion is more limited.

At the baseline, HEWs had reported already using different hygiene promotional efforts also detected at the endline, including relying on model households, model farmers, peer education based on the involvement and training of community health promoters to impart group talks, and school-based activities. House-to-house visits to promote healthy practices were also part of their promotional strategy. In a very limited number of subdistricts, respondents talked about using a “walk of shame.”

Training, Access, and Use of BC and M&E Tools Introduced Via WSP/HIP/Amhara Health Bureau Training Activities

High Intensity Districts

Training

Study participants in high intensity districts reported at the endline assessment that the WSP/HIP coordinator from the Regional Health Bureau, members of the district WASH committees, and the sector offices working in WASH (like district water and health offices and

CFTs) provided training, mentoring, and technical support for HEWs and household visitors working on WASH programs. The training and mentoring was widely acknowledged as helping HEWs fulfill their WASH mandate as hygiene promoters. The support mainly focused on building the capacity of the subdistrict level implementers and was targeted toward specific program interventions like health, education programs, shame walk, and so forth.

According to the interviewed officials, the HEWs operating in subdistricts supported by WSP/HIP were trained together with the other members of the subdistrict WASH committees. Such trainings were often carried out immediately before the program was launched in the specific subdistrict. It was further reported that the HEWs were always part of the WASH program planning and regular program review supported and jointly carried out with the district WASH committees.

In certain high involvement districts, the above mentioned supports provided to the HEWs were reportedly constrained by a shortage of funding and vehicles that could be used for monitoring program activities. As a result, the district WASH committees could not carry out regular review meetings and provide the required mentoring and monitoring support for the subdistrict level implementers as required. Shortage and inadequacy of health education materials like the *mikikir* card (a job aid used for negotiating improved hygiene practices) and posters were also mentioned among the problems faced by the WASH program implemented in certain subdistricts.

HEWs reported that mobilizing the community for WASH activities included training on a number of topics—constructing latrines, making water safe for drinking, keeping drinking water safe, maintaining personal and environmental hygiene including hand washing at critical junctures. Most HEWs noted that the training they received from WSP/HIP helped them to acquire comprehensive knowledge on how to address key water, hygiene, and sanitation related issues in their day-to-day activities. Most interviewed HEWs also acknowledged the training was useful to effectively promote WASH activities among the community in their respective localities. Some of the HEWs further noted that members of the district WASH committees and CFTs, apart from providing the needed technical support, were often directly involved in hygiene promotion education conducted at the community level. Such initiatives were also reported as being helpful to achieve a wider acceptability from the community members.

The HEWs further noted that after receiving the WASH training from WSP/HIP, they were able to cascade the training to volunteer community health workers as they had been trained to do—"household visitors" selected from the community to provide free community service in the area of WASH. However, some HEWs interviewed from South Achefer district specifically mentioned that the level of support that they were getting from the subdistrict and district

level officials to properly execute the WASH activities varied in intensity and was not regularly carried out specifically during the six months prior to the survey. While explaining the level of support they were getting, one of the HEWs from Keltafa subdistrict from South Achefer district said:

> *In the previous years, we used to get follow up and proper technical support from members of the district WASH committee and the subdistrict officials. However, in recent months, the support has greatly diminished and this is mainly attributed to the involvement of the district and subdistrict level officials in the recent election. Due to the low level of support we received from the concerned bodies, we could not achieve some of the WASH related targets set for this year. For example, despite a 100 percent latrines coverage planned for the current fiscal year, only 1,073 of the 2,603 households in the subdistrict managed to construct latrines.*

Tools

The endline review concluded that the BC and M&E tools, which HEWs were trained to use, may be known by different implementers from the public sector but are not always used or not used consistently. Study participants from Gonder Zuria and Tehuledere, for example, reported being aware of the different BC tools and using them regularly for over two years. Yet, only a limited number of HEWs from another visited district, South Achefer, reported consistent use of health education materials like the mikikir card for the behavior change negotiating activities they conducted at the household and community levels. Study participants at the district level from Kewet, on the other hand, reported that they were not acquainted with the tools.

Reaction about and use of M&E tools, specifically, is also mixed and it depends on the district and the person interviewed. Study participants from Tehuledere and Gonder Zuria reported that they were aware of the tools and had been using them for over two years. Explaining how the M&E tool was useful to the program, one official from Tehuledere stated, “After we started using the tool, we are able to track the achievements of the planned activities, identify the implementation gaps, and take immediate corrective measures for the problems. It is also helpful to ensure the quality of the program implementation. The tool is simple and convenient to use.” A district official from Gonder Zuria reported that though the tool was useful, he found it cumbersome to use. He also indicated that people require adequate time and training to complete and properly use the tool. The M&E tools are less known and used in Kewet.

At the baseline, the majority of subdistrict level respondents interviewed reported being unfamiliar with the M&E tools developed by the Learning by Doing Initiative. Among the very few that said otherwise, only an even more limited number had been able to describe the content of the tools or explain their benefits. This may be partially due to the fact that M&E

tools were distributed officially to trainees in February 2010, even though baseline data collection forms had been distributed to HEWs during the training they may have undergone in data collection and collation.

Low Intensity Districts

Most of the interviewed HEWs from the subdistricts in low intensity areas reported that they received different types of support, mainly through supervision from the district health offices and health extension supervisors. Some HEWs also reported receiving WASH related training and technical support from donors working in WASH programs. Some of the interviewed officials from the district health office reported that the plans and achievements of the WASH program activities implemented by the HEWs were often thoroughly reviewed during the biannual joint program review exercises conducted by the district health offices and the HEWs.

The HEWs further reported that they received support from the administration of their respective subdistricts while they recruited and trained volunteer community health workers. The trained VCHWs were responsible for 25 to 30 households and were often positioned within the community to provide the support HEWs needed while implementing the different packages of the health extension program. The trained VCHWs assisted the HEWs by conducting home visits and educating members of the households about different health issues including hygiene and sanitation.

Most of the interviewed HEWs also acknowledged that the support they were getting from district health offices and donors helped them comply with their WASH mandates as hygiene promoters.

None of the low intensity districts reported using an established M&E mechanism to control their WASH related activities.

This situation is not very different from what had been detected at the baseline. The baseline assessment report stated:

> *None of the respondents from the woredas or the kebeles reported knowing, ever hearing about, or using any monitoring and evaluation tools developed by ARHB/WSP-AF/USAID-HIP.*

Report of Progress Data

High Intensity Districts

The majority of the district and subdistrict level respondents reported at the endline assessment that the implementation and monitoring of the WASH related action plan at the district and subdistrict levels were carried out in a coordinated manner and by different level

stakeholders. The district WASH committees took the lead in following up WASH related activities that took place at the subdistrict and community level. According to the district level officials, in the majority of the cases WASH committees led by the district administration met on a monthly basis to monitor the implementation of WASH activities that took place in the district. During such meetings, the district level sector offices represented in the district WASH committees presented the WASH related performance of their respective sector for discussion. Program achievements vis-à-vis the targets set on the action plan, implementation constraints, resource availability, mobility of finance, etc. were some of the key issues raised and discussed during the regular monthly meetings.

Similarly, the district WASH committees reported following up on the implementation of WASH activities at the subdistrict level through different mechanisms, including regular monitoring visits, regular reports, and joint review meetings conducted with members of the subdistrict WASH committees. WASH related targets jointly set by the district and subdistrict level stakeholders during the annual planning process were the basis for the evaluation of progress. Some district officials reported that due to time and budget limitations such review meetings were not carried out on a regular basis.

Low Intensity Districts

Unlike the high involvement districts, the majority of the district and subdistrict level respondents from the low intensity districts reported that the implementation and monitoring of WASH activities occurred at the sector specific level and were carried out in line with the regular working procedures of each sector office following the normal reporting line.

Each sector office involved in the implementation of the WASH program reported its specific WASH activities to the district cabinets on a monthly basis. Subdistrict sector offices followed similar reporting procedures; they presented and discussed WASH related activities during the subdistrict cabinet meetings. The subdistrict meetings were often conducted on a weekly or bimonthly basis.

Officials from the district water and health offices of some of the low intensity districts further reported conducting monitoring visits with NGOs to construct water points. However, most admit that such subdistrict monitoring visits by sector offices and NGOs lacked regularity. Lack of experience in planning, implementing, and monitoring and evaluating the different activities of a WASH program and a shortage of transportation, manpower, and finances are the major reasons cited by the majority of the officials interviewed from the control districts for the lack of mechanisms to jointly plan and monitor WASH related programs.

The following table summarizes the findings pertaining to the institutional assessment.

Table 3: Summary of Findings of Institutional Assessment

Indicator Tracked	High Intensity Districts	Low Intensity Districts
WASH teams at the district and subdistrict levels	At endline, all districts have operational WASH district teams integrated by key public sector partners. Water and health offices assume leadership role in WASH teams. Subdistrict WASH committees established and operational in most subdistricts of high intensity areas.	None but one of the low intensity districts have a district WASH team. No subdistrict WASH teams have been established either. No coordination mechanisms across public sector stakeholders or donors available.
Joint district WASH plans	WASH team members representing public sector stakeholders review annual plans presented by each sector. Integration of activities is sought and officers in charge endorse collective plans. A similar picture emerged at the subdistrict level. Involvement of NGO sector is limited.	Across sectors (water, health, and education) coordinated planning is absent. Sector specialists are unaware of what their counterparts in other sectors are doing. Skills lacking on how to conduct integrated planning. Situation unchanged from baseline.
Integrated hygiene and sanitation improvement software actions to complement hardware investments	Hand and face washing, safe disposal of household waste, treatment and storage of drinking water integrated with the promotion of sanitation. CLTS used in subdistricts that received technical and financial support from WASH teams. Health education workers and volunteer community workers involved in all program aspects. Several community level events implemented in support of hygiene and sanitation promotion. CFTs formed in all four high intensity districts, operational in three. CFT	WASH software is part of health extension program and follows regular channels: model households, model farmers, and household visits. Use of CLTS is limited. Software associated with water supply carried out by water sector. Involvement of water committees in hygiene and sanitation program is limited.

	support work in selected subdistricts only.	
Training and access and use of BC and M&E tools introduced via WSP/HIP/Amhara Health Bureau training activities	Wide training for HEWs on WASH issues reported. Availability of resources to conduct work required of HEWs not generalized across districts and subdistricts. Mixed findings about the availability and use of tools.	Access to training much less common. Supervision is the main vehicle to obtain support for the implementation of hygiene promotion. None of districts reported using M&E tool to control WASH related activities. Similar situation to that detected at baseline.
Report of progress data	District WASH committees follow up through monthly meetings on implementation of activities at district level and through other mechanisms at the subdistrict level (i.e., regular monitoring visits, regular reports, joint review meetings). Regularity of monitoring at subdistrict level needs to be improved.	Implementation and monitoring of activities occurred at sector-specific level. Monitoring visits by sector officers to support subdistrict activities lacked regularity. Lack of coordinated planning leads to a lack of coordinated reporting.

Household Results

Results at the household level presented below are broken down only by measure: baseline and endline. No comparisons by intensity strata are offered as no statistical differences were found at the endline between the high and low intensity districts regarding exposure to program activities, regardless of the measure of exposure considered. Consequently, for all intents and purposes, no differential level of intensity could be demonstrated. This finding most likely reflects the commitment of the Amhara Health Bureau to have a hygiene and sanitation program that would affect all districts in the region, regardless of the presence of additional international or domestic NGO partners, and could help increase reach and expand coverage**.**

In the section that follows, when variables are categorical, data presented are percentages. The denominator used to derive the percentages is indicated when data are in tabular form under the “Baseline” and “Endline” headings of the respective columns in the tables presenting findings.

Sociodemographic variables at both measures are presented first. They are followed by sections addressing sanitation, hand washing, and drinking water treatment and storage. Within each one of those sections exposure variables are presented first, knowledge variables, if any, are presented second, measures of promoted practices are presented third, and variables that may help explain behavior change are presented last.

Discussion below addresses, but is not limited to, the following indicators related to the adoption of hygiene practices at the household level included in the Learning by Doing Initiative's M&E plan:

- Percent of households using improved sanitation facilities meeting minimum standards
- Percent of caretakers washing their hands with cleansing agents during two critical junctures to prevent diarrheal disease
- Percent of hand washing stations near improved sanitation facilities meeting minimum standards with appropriate hand washing supplies
- Percent of targeted households practicing effective household water treatment
- Percent of targeted households practicing effective drinking water storage

Sociodemographic Variables

Table 4 summarizes the sociodemographic characteristics of respondents. This table indicates statistically significant differences between the two samples. In the endline the percentage of individual homes visited is slightly higher. So is the percentage of homes with corrugated roofs, with stone and mud walls, and with dirt/sand floors. The same is true for the proportion of respondents who attended school and who claim to be able to read and write. Respondents in the endline are younger and live in relatively larger families. As will be seen later, these sociodemographic variables are not predictors of sanitation uptake.

Table 4: Sociodemographic Characteristics of Respondents (Percentages)

Sociodemographic Characteristics of Respondents		Baseline (n=2000)	Endline (n=1378)	Chi2	p
Type of dwelling visited	Individual home	68	71	5.8	.05
	Home integrated into communal compound	25	23		
	Other	7	5		
House roof material	Corrugated iron	65	67	131.1	.00
	Thatch/leaf	28	23		
	Reed/bamboo	5	1		
House wall	Wood and mud	89	85	889.7	.00
	Stone and mud	7	12		

material	Bamboo	3	1		
House floor material	Dung	83	52	369.4	.00
	Dirt/sand	16	45		
Mean number of people living permanently in dwelling		5.3	5.6	4.4	.00
Respondent's mean age		35.4	30.3	13.9	.00
Respondent attended school		14	21	33.9	.00
Respondent can read and write		12	17	21.5	.00

Sanitation

Exposure

Findings regarding exposure to sanitation promotion activities/messages appear in Table 5. The recall period for exposure was one month in the baseline and six months in the endline. This change is due to different timelines for intervention activities throughout the region as the project was implemented and moved toward its latter stages. Because of the change in the time frame, no statistical comparisons between measures are presented. The questionnaire included only unprompted answers at the baseline, but it included both prompted and unprompted responses at the endline.

At the baseline, 52 percent of the household study participants reported unprompted exposure to information about sanitation in the month prior to the survey. More than one information source could have been mentioned by respondents as multiple responses were possible. The most frequently mentioned source of information mentioned at the baseline was outreach extension workers working at the community level (52 percent), and the second most frequently mentioned source was the health center (40 percent). Additional channels at the baseline, including school children, radio, and other channels, were mentioned by no more than 2 percent of the respondents.

At the endline, only 39 percent of the respondents indicated exposure to information about sanitation in the six months prior to the survey. The difference between the baseline and the endline could in part be due to the change in the recall period used at each measurement. At the endline, the most commonly mentioned unprompted information source continued to be extension workers at the community level (36 percent), even though a big shift was detected regarding the second most frequently mentioned source—the health facility mentioned by 40 percent of the respondents at the baseline. Only 4 percent mentioned health facilities at the endline. Other information sources mentioned remained low, including leader farmers, one of the new channels tapped by the Learning by Doing Initiative.

Prompted sources of information at the endline included visits by health extension workers to stop open defecation (73 percent), to improve the toilet (66 percent), or to discuss what toilet may be appropriate for the family (64 percent). Participation of the respondent's village in the walk of shame, a proxy for CLTS, was mentioned by 25 percent of the respondents.

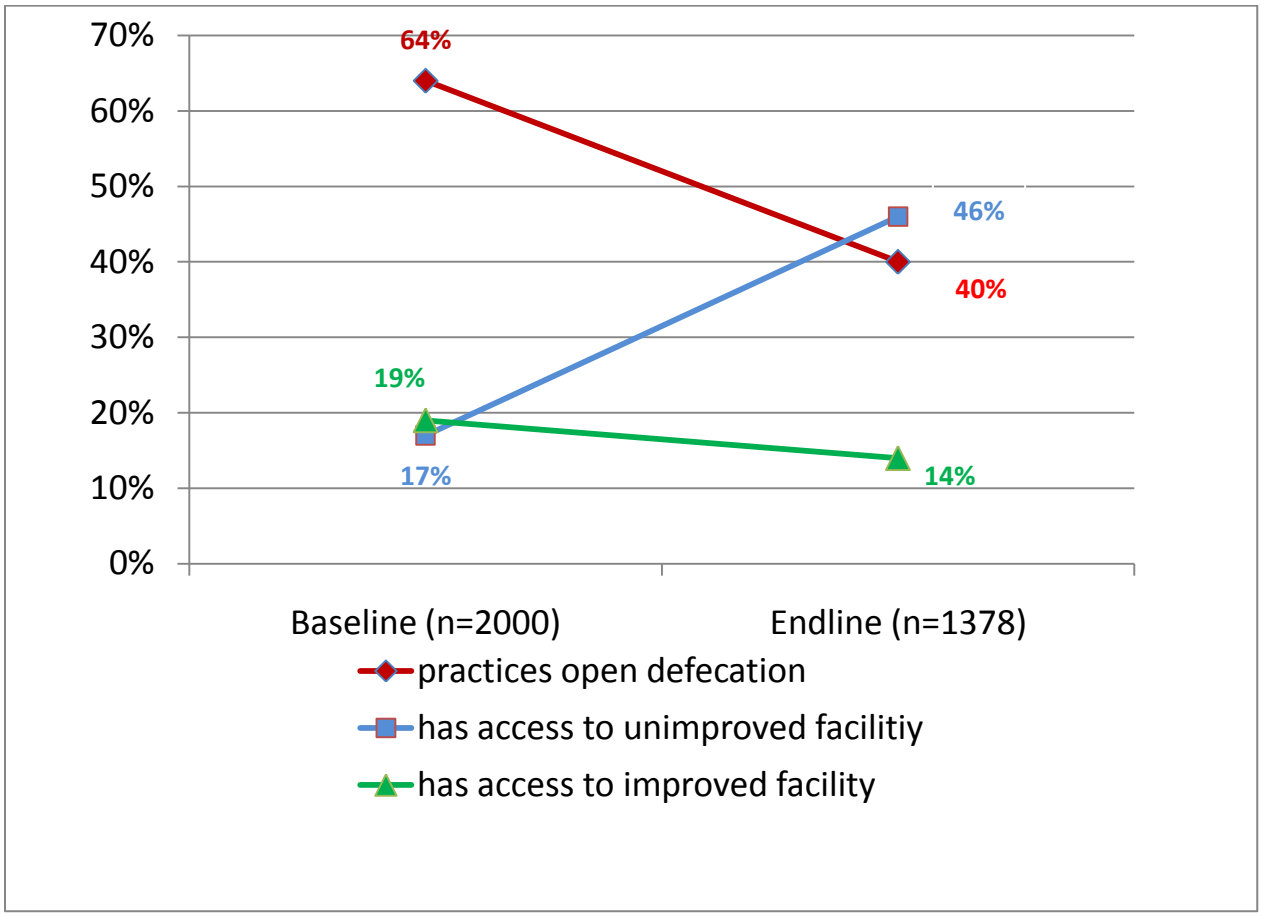
Table 5: Exposure to Sanitation Promotion (Percentages)

Exposure Variables		Baseline (n=1990)	Endline (n=1378)
Exposed to information about sanitation in the past one/six months		52	39
Sources of information (unprompted)	Outreach extension worker at community level	52	36
	Health center	40	4
	School children	1	1
	Leader farmers	NA	1
	Radio	1	1
	Other channels	2	1
Sources of information (prompted)	Visited by outreach worker to stop open defecation	NA	73
	Visited by HEW to improve sanitation	NA	66
	Discussed with HEW what type of toilet would be appropriate	NA	64
	Walk of shame conducted in village	NA	25

Sanitation Coverage

Chart 1 presents findings related to sanitation coverage. These findings indicate a drop of 24 points in the practice of open defecation between the baseline and the endline, a 29 percent increase in the adoption of unimproved sanitation, and a 5 percent drop in the access to improved sanitation. Comparisons across measures are statistically significant (Chi2=332.7, p=.00). Self reported data were later validated as enumerators requested access to facilities to determine if they were used and whether there was a hand washing station within or in proximity of the latrines.

Chart 1: Access to Sanitation Facilities



The percentage of households owning a latrine that shared their facility with other households was 17 percent at the baseline and almost 20 percent at the endline. These differences were not statistically significant (Chi2=3.0, p=.22). The mean number of households that reported sharing a facility decreased from 8.8 to 3.3 households from the baseline to the endline among households involved in that practice. This drop is statistically significant (t=12.1, p=.00).

In either measure the husband typically made the decision to install a latrine (72 percent in the baseline and 74 percent in the endline). The husband also installed the latrine in most cases (78 percent in the baseline against 77 percent in the endline). The small differences detected concerning these issues between measures are not statistically significant.

Table 6 presents some of the observed physical characteristics of latrines between measures collected in households permitting surveyors to visit latrines. The data in this table indicate that significant differences were detected between latrines across measures as a higher proportion of latrines in the endline had walls and a roof. However, the data also indicate that a significantly lower percentage of latrines at the endline had an entry permitting privacy.

Table 6: Physical Characteristics of Latrines (Percentages)

Some Physical Characteristics of Latrines	Baseline (n=675)	Endline (n=839)	Chi2	p
Has walls	63	73	21.5	.00
Has roof	63	70	10.5	.00
Has protected entry (curtain or door)	40	26	33.9	.00

Chart 2 indicates that the general tendency was for the latrine to show at least one sign of use—there was a clear path to the latrine from the house, the latrine was smelly, there were flies in the vicinity, the slab was wet, etc. Nevertheless, the chart also indicates that the percentage of latrines showing signs of use was nine points lower in the endline. This difference was statistically significant (Chi2=31.2, p=.00).

Chart 2: External Signs of Latrine Use

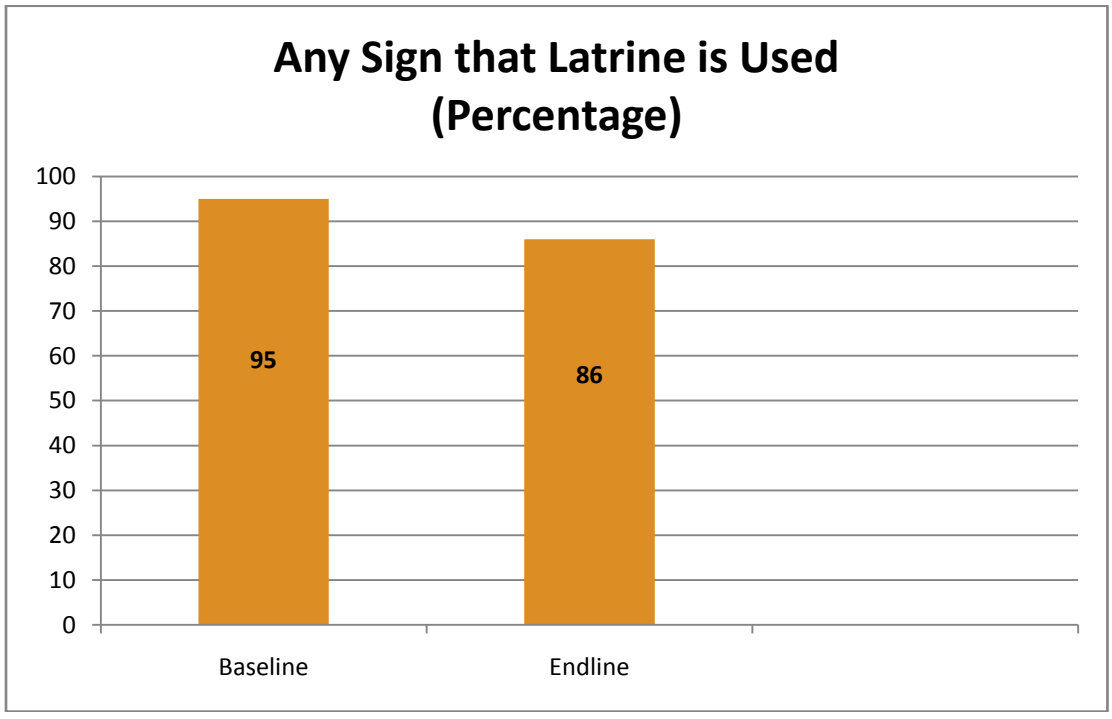


Table 7 presents findings regarding the top three self reported reasons for building a latrine among latrine owners. In both measures the order of frequency of the reasons mentioned is identical. Statistically significant increases were observed among all reasons, except for fear of environmental contamination, where the increase detected was not statistically significant. Disease prevention and environmental contamination were components stressed during the CLTS activities.

Table 7: Top Three Reasons for Building a Latrine (Percentages)

Reasons	Baseline (n=685)	Endline (n=801)	Chi2	Significance
Disease prevention	67	74	4.8	.03
Fear of environmental contamination	41	45	2.9	.22
Security	13	22	21.4	.00
Comfort	12	21	22.9	.00
Privacy	3	13	52.5	.00

To try to understand the predictors of sanitation uptake, a model was constructed using logistic regression. The model was constructed using only endline data. The model included different types of variables that may be grouped along the following categories: household characteristics, intervention characteristics, perceptions about latrine ownership considered to be spin-offs of sanitation promotion efforts given the activities implemented or the slogan used by the intervention, and beliefs about latrine possession defined following a theoretical model based on the Theory of Reasoned Action (Fishbein and Ajzen 1975[5]). Table 4 presented the findings of this analysis. It includes only the statistically significant predictors detected. Findings in this table show that two of the proxy measures for intervention characteristics included in the model are significant predictors of sanitation uptake: the participation of the community where the respondents reside in a walk of shame, which is a proxy for CLTS, and the household visit of health education workers to discuss sanitation improvement. The table also indicates that the perception that ownership of a latrine contributes to the community's health as well as to the community's development also predicts sanitation uptake. The first perception is associated with CLTS activities and the second one with the slogan used to promote sanitation and hygiene by the Learning by Doing Initiative as well as the community mobilization and negotiation components of the program in Amhara. A final element that is a predictor of sanitation uptake is the perception that latrine ownership makes the owner popular. This perception may also be a spin-off of CLTS since that component of the program promotes compliance with a community designed plan to stop open defecation, which may end up making latrine owners popular.

Table 8 includes the odd ratios for each one of the predictors. Logistic regression models are additive. Thus, data suggest that when all the predictors are present, households are 11.67 times more likely to have adopted a latrine than when they are not.

[5] Fishbein, M., & I. Ajzen. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Table 8: Predictors of Sanitation Uptake at Endline

Dimensions	Factors	Significance	Beta	Odds Ratio
Household characteristics	House is part of a compound	.03	.97	2.65
Intervention characteristics	Community participated in walk of shame	.00	.81	2.23
	Household visited by health worker to improve sanitation	.05	.56	1.75
Intervention spin-off perceptions	Having a latrine contributes to the community's health	.00	.94	2.6
	Having a latrine contributes to the community's development	.00	.61	1.8
Beliefs about latrine possession	Having a latrine makes owners popular	.00	.45	.64
Total				11.67

Table 9 presents self reported reasons why families may have not installed a latrine and may continue to practice open defecation. These findings are valid for open defecators only. The information presented in the table is organized by frequency of responses. The order of these frequencies is identical for both measures, and it indicates the importance of limitations families may face: no one in the family able to construct the latrine, lack of land/space to build the latrine, lack of construction materials, and not knowing how to construct it. Comparisons between measures show that two of the mentioned reasons increased in frequency from the baseline to the endline: lack of land and lack of construction materials. Those increases are statistically significant.

Table 9: Top Three Reasons for Not Having a Latrine

Reasons	Baseline (n=1268)	Endline (n=489)	Chi2	Significance
No one in family able to construct latrine	20	18	.58	.24
Lack of land for building the latrine	11	15	3.7	.06
Lack of construction materials	5	14	38.3	.00
Does not know how to construct latrine	9	8	.39	.30
Cost of facility	4	4	.08	.45

Hand Washing

Exposure

Table 10 presents findings about the exposure to information about hand washing. For the same reasons mentioned earlier in connection to exposure to sanitation information, no statistical comparisons across time are included in the table.

At the baseline 28 percent of the respondents reported unprompted exposure to hand washing information. The most commonly mentioned source of information for these messages was the outreach extension worker, and the second most commonly mentioned source was the health center. All other channels reported playing a minor role, if any. Endline rankings are not very different, even though the percentages associated with each information source are dramatically different. Again, the reader must remember that the recall period for exposure is quite different, and this may be the reason behind the variations in the percentages.

Table 10: Exposure to Hand Washing Promotional Efforts

Exposure Variables		Baseline (n=2000)	Endline (n=1378)
Exposed to information about hand washing in the past three/six months		28	25
Sources of information (unprompted)	Outreach extension worker at community level	15	22
	Health center	12	3
	School children	0	1
	Leader farmers	NA	0.3
	Radio	1	0
	Other channels	1	1

The endline questionnaire was modified to include a question that would allow exploration of the content of the hand washing messages respondents were exposed to. The distribution of responses to this question appears in Table 11. Multiple answers were allowed, but respondents tended to give only one answer. The most common answer provided is a generic statement about the importance of washing hands with soap. Less frequent responses are more specific and include, in order of frequency, the junctures when hands should be washed with soap, where to place a hand washing station, the technique of hand washing, or how to make a tippy tap.

Table 11: Reported Content of HW Promotional Efforts at Endline (Unprompted)

Content	Endline (n=1378)
Important to wash hands with soap	19
When to wash hands with soap	12
Where to put hand washing station	10
How to wash hands with soap	7
How to make a tippy tap	5

Knowledge

Table 12 presents findings concerning the knowledge respondents have about when hands should be washed with soap to prevent diarrheal disease. The junctures are listed in order of frequency. In general, food handling junctures are more frequently mentioned than junctures where there is risk of contact with fecal matter. The order of frequency is practically identical in both measures. However, statistically significant increases exist in knowledge from the baseline to the endline for all junctures listed.

Table 12: Knowledge of Crucial Hand Washing Junctures to Prevent Diarrheal Disease (Unprompted)

Junctures	Baseline (n=2000)	Endline (n=1378)	Chi2	P
Before eating	63	75	57.5	.00
Before cooking	46	58	48.8	.00
After defecation	19	59	571.2	.00
Before feeding a child	8	24	150.7	.00
After cleaning a child's bottom/changing a diaper	5	20	164.1	.00

Practices

Hand washing practices were measured through self reports and through proxies that focus on the existence of hand washing stations/devices and the presence of supplies at these stations. Two hand washing stations/devices were explored: those commonly used by the household and those that may exist at latrines.

Table 13 presents self reported hand washing practices by cleansing agent. Data indicate that it is generally more common to report having washed hands with soap than with ash. The use of soap is about five times more common than the use of ash at either the baseline or the endline. In addition, the self reported use of soap increased significantly from 51 percent to 56 percent from the baseline to the endline, whereas the self reported use of ash remained constant. The drop from 10 percent to 9 percent reported in the table is not statistically significant. The self

reported use of any cleansing agent increased from 55 percent to 60 percent and that difference is statistically significant. This change is expected given the rise in the self reported use of soap.

Data in Table 13 also indicate that the self reported use of any cleansing agent at one of the critical junctures for diarrheal disease prevention increased significantly from 21 percent to 47 percent between measures. The self reported use of any cleansing agent during at least two junctures also increased significantly between measures from 2 percent to 14 percent. Despite these increases, and if we accept self reported hand washing measures, there is still much room for improvement.

Table 13: Self Reported Hand Washing Practices
("Did you use soap/ash yesterday? What for? Any other time? What for?")

Self Reported Practices	Baseline (n=2000)	Endline (n=1378)	Chi2	P
Used only soap (as cleansing agent) the day before the interview	51	56	6.7	.00
Used ash (as cleansing agent) the day before the interview	10	9	1.4	.13
Used soap or ash day before the interview	55	60	7.4	.00
Use of any cleansing agent at any critical juncture among users of cleansing agent (baseline=1097, endline n=821)	21	47	88.0	.00
Use of any cleansing agent at least at two critical junctures among users of cleansing agent (baseline = 1097, endline n=821)	2	14	146.7	.00

Table 14 presents data of a more in-depth exploration of the specific junctures when use of soap was self reported. These data reflect some of the findings discussed earlier as use of soap for food handling related junctures are more frequent at any measure than the use of soap when fecal contact may occur. This is true despite the fact that the self reported use of soap remains generally rather low.

Table 14: What was soap used for the morning before the survey?

Categories of Opportunities	Specific Junctures	Pre (n=1018)	Post (n=772)	Chi2	P
Fecal contact opportunities	After defecation	3	25	187.37	.00
	After cleaning a child's bottom	1	3	13.5	.00
Food handling opportunities	Before cooking	14	23	24.3	.00
	Before eating	8	9	1.0	.17
	Before feeding a child	1	5	31.8	.00
Any juncture		26	43	90.4	.00
At least two junctures		2	12	148.2	.00

Table 14 presents findings of a similar, in-depth exploration, this time for ash. In general, these findings reflect the low self reported use of ash. Food handling junctures are more frequently mentioned than other junctures at the baseline, but there is an increase in the use of ash after defecation, which is statistically significant.

Table 15: What was ash used for the morning before the survey?

Categories of Junctures	Specific Junctures	Pre (n=203)	Post (n=123)	Chi2	P
Fecal contact opportunities	After defecation	0	3	6.6	.02
	After cleaning child's bottom	2	1	.68	.34
Food handling opportunities	Before cooking	4	4	.02	.56
	Before eating	2	2	.01	.62
	Before feeding a child	0	0	NA	NA
Any juncture		8	10	.34	.35
More than one juncture		0	0	NA	NA

Table 15 focuses on the proxy measure of hand washing practices, which is more objective and relies on the availability of hand washing supplies at a hand washing station/device commonly used by family members. Data in Table 15 indicate a significant drop in the presence of both soap and water at commonly used hand washing stations/devices from the baseline to the endline; the presence of both supplies at such locations remains relatively low and under 10 percent at both baseline and endline. This drop is explained by the drop in the availability of soap at these locations at the time of the survey. However, data in Table 15 also indicate the significant increase in the presence of water between measures. Water was observed in 14 percent of the households at the baseline and in 22 percent of the households in the endline at commonly used hand washing stations/devices.

Table 16: Hand Washing Supplies at Commonly Used Hand Washing Station/Device (Percentage)

Indicators	Pre (n=1454)	Post (n=1177)	Chi2	p
Water and soap observed	8	6	3.1	**.05**
Water observed	14	22	25.4	**.00**
Cleansing agent observed	45	23	145.8	**.00**

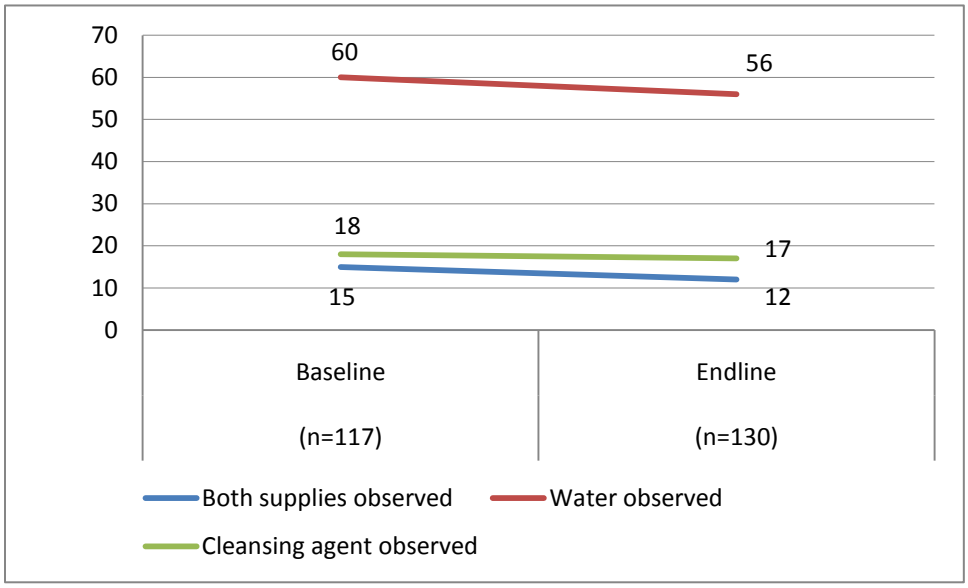
Study participants generally permitted enumerators to see sanitation facilities. Ninety-seven percent did so at the baseline and 99 percent did the same at the endline.

Data concerning the presence of a hand washing station at a latrine (inside or within 10 paces of the latrine) showed that there was relatively little change in the presence of hand washing

stations at latrines over time. However, because the absolute number of latrines increased, the data indicate that the absolute number of hand washing stations/devices at the latrines increased as well. The same is not true for the relative number of those stations/devices, which was 17% at the baseline and 16% at the endline, and thus not statistically significant. As a result, findings suggest that hand washing stations/devices at latrines kept pace with the growing number of latrines.

Chart 3 presents data concerning the availability of hand washing supplies at the hand washing station/device at the latrine. Although many of these devices had water, not very many had a cleansing agent. As a result, the presence of both hand washing supplies at such locations remained low and, statistically speaking, constant. Changes over time represented in this graph are not statistically significant.

Chart 3: Hand Washing Supplies at/Near Latrine (Percentages)



Water Supply and Household Water Treatment and Storage

Fifty-eight percent of visited households had access to protected water sources per the Joint Monitoring Program definition both at the baseline and the endline. Average time to get to the water source was 42. 5 and 39.4 minutes; the difference between measures is statistically significant (t=2.2, p=.03). As such, the percent of households that had access to a water source within 30 minutes of the household increased from 59 percent at the baseline to 64 percent at the endline. This increase is statistically significant (p=8.8, p.00).

Exposure to Household Water Treatment and Storage (HWTS) Promotional Messages

At the baseline 38 percent of the study participants reported exposure to messages regarding the treatment of drinking water. When allowed multiple responses, the most commonly

mentioned unprompted source for this information was the health center (15 percent), followed by outreach workers (health education workers or village volunteers involved in hygiene promotion) (14 percent), and the radio (7 percent). School children and other channels were mentioned only by about 1 percent of respondents.

At the endline the percentage of those indicating exposure to messages about household drinking water treatment is only 22 percent. The most commonly mentioned unprompted source for this information was the outreach extension worker (19 percent). The rest of the sources were mentioned by less than 3 percent of respondents.

Table 17: Exposure to Household Water Treatment and Storage Messages (Percentages)

Exposure Variables		Baseline (n=2000)	Endline (n=1378)
Exposed to information about water treatment and storage in the past one/six months		38	22
Sources of information (unprompted)	Outreach extension worker at community level	14	19
	Health center	15	3
	School children	1	1
	Leader farmers	NA	1
	Radio	7	2
	Other channels	1	1

Table 18 presents a distribution of the topics addressed in response to an unprompted question. This information is only available for the endline. Two of the topics mentioned without prompting were related to the use of treatment options: the use of Wuha Agar (15 percent) and the use of a strainer (10 percent). The other topic mentioned was related to boiling, and specifically about how long to boil (12 percent).

Table 18: Content of Household Water and Treatment Messages – Unprompted (Percentages)

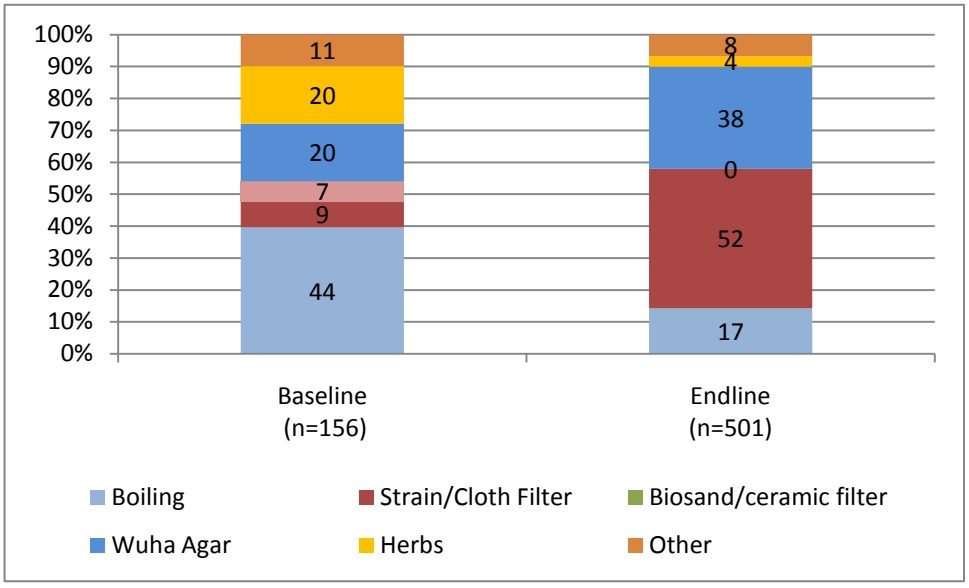
Content of HWTS Messages	Endline (n=1378)
Use of Wuha Agar	15
Strain water with cloth	10
Boil water until you can see the bubbles bursting	12

Practices

At the baseline, 8 percent of the study participants reported treating their water for drinking. At the endline that figure increased to 36 percent. This change is statistically significant (Chi2=413.3, p=.00).

Chart 4 presents the distribution of household water treatment practices by measure. The chart shows a 43 point increase in the reported use of straining or cloth filtering from 9 percent to 52 percent. It also shows an 18 point increase in the use of Wuha Agar, the local name for the hypochlorite water treatment product known worldwide as WaterGuard, from 20 percent to 38 percent. The chart also shows drops in the use of boiling from 44 percent to 17 percent, in the use of herbs from 20 percent to 4 percent, and from 11 percent to 8 percent for other methods. The denominator used for these figures is the number of respondents that indicated that they treat water. All of these differences are statistically significant. While these increases are an interesting finding, and some go in a desirable direction, we could not interpret these results due to lack of additional information about what contributed to this change.

Chart 4: Distribution of Water Treatment Methods by Measurement



Storage of Drinking Water

Significant differences exist in the percentage of households reporting that they stored drinking water; it dropped from 85 percent at the baseline to 32 percent at the endline (Chi2 =783.9, p=.00). No difference was detected, however, regarding permission to see the container since 97 percent and 98 percent of the respondents at the baseline and the endline, respectively, gave permission.

Table 18 presents findings regarding the characteristics of drinking water storage containers when they were observed. Significant changes were detected in terms of the type of water storage container observed. A significant drop occurred in the presence of only wide mouth insira (traditional clay water container) while the presence of only narrow mouth insiras increased. A drop in the presence of only jerry cans was also recorded. The data indicate a small, yet statistically significant drop in the percentage of households where all containers are covered with hard covers from 71 percent to 68 percent. Information was only available for the endline about how tight fitting the lids were, and the data in Table 19 indicate that 60 percent of observed containers had this characteristic. A statistically significant increase was recorded during the household visit in the percentage of containers that had a tap. There was a significant drop in the percentage of storage containers that were cracked, while the percentage of containers placed in areas accessible to animals remained constant. As a general conclusion, some improvements in water storage have been detected.

Samples of different types of containers used to store water, including the traditional insira.

Table 19 also contains information about the method of extracting water from the containers. This information is available only for the endline. It indicates that the most common extraction method is the use of cups that were not properly stored at the time of the household visit. The second most commonly used method is also a cup, but one observed to be properly stored, while the third most common extraction method is pouring. The use of a ladle, stored properly or not, was relatively low.

Table 19: Characteristics of Drinking Water Storage Containers (Percentages)

Indicators		Pre (n=1586)	Post (n=477)	Chi2	p
Type of container observed	Only wide mouth insira	67	48	51.3	**.00**
	Only narrow mouth insira	2	12	22.5	**.00**
	Both types of insira	0	1	10.2	**.00**
	Only jerry cans	22	12	22.5	**.00**
	Jerry cans and narrow mouth insira	15	1	69.2	**.00**
	Jerry cans and wide mouth insira	15	5	29.4	**.00**
All containers are covered with hard covers		71	68	69.7	**.00**

Lids are tight fitting		NA	60	NA	**NA**
Containers have taps		3	10	46.0	**.00**
Some or all containers are cracked		12	10	88.0	**.00**
Containers accessible to animals		33	33	.01	**.48**
Method to extract water from container	Pours directly from container	NA	14	NA	NA
	Uses ladle properly stored		4		
	Uses ladle improperly stored		4		
	Uses cup that is properly stored		18		
	Uses cup improperly stored		58		

School Results

The discussion regarding schools focuses on, yet is not limited to, the following indicators included in the Learning by Doing Initiative's M&E Plan:

- Percent of students with increased knowledge of promoted hygiene practices
- Percent of targeted schools complying with child/latrine ratio defined by the National Protocol for Hygiene and Sanitation
- Percent of targeted schools with water supply
- Percent of targeted schools with hand washing stations that have running water and cleansing agent

This section is divided into two parts. The first part focuses on the results of the qualitative study conducted at the endline in which school directors and teachers were interviewed at both the high and low intensity districts and subdistricts. The second part contains findings from the school survey. The 2010 measure may be considered as the baseline of the school assessment since this component was just getting off the ground in the spring of 2010.

Qualitative Interviews

High Intensity Districts

At the endline WASH teams and committees at the district and subdistrict levels reported that schools in their jurisdiction received financial support to construct latrines, hand washing facilities, and water supply systems for schools. WASH programs also provided education materials like manuals, posters, and leaflets.

As part of their conversion into WASH-friendly schools, some schools installed separate latrines for male and female students and teachers with functional hand washing facilities near them; prepared dry waste pits on school grounds; and conducted regular classroom lessons on hygiene and sanitation issues. In the majority of the schools WASH-trained teachers facilitated the WASH-related education. In such instances hygiene and sanitation education was often

incorporated into environmental science education and taught to the students as part of the school curriculum.

Some schools located in certain high intensity subdistricts also reported preparing model sanitation units that are intended to demonstrate to the students and the surrounding community how to construct and use WASH-related hardware at the household level. Though the entire package was rarely observed during the school visits, theoretically the models often include a pit latrine, a "tippy tap" hand washing facility, a dry pit, a smoke free kitchen, and a shelf to hold household utensils.

Most teachers and students who received WASH training reported active involvement in educating and promoting hygiene and sanitation practices at school and to the rest of the community. Students from WASH-friendly schools often operated as hygiene and sanitation messengers and helped to disseminate hygiene and sanitation information to their families, friends, and other community members. They also played an active role in promoting positive hygiene and sanitation behaviors like hand washing, latrine use, safe disposal of animal waste, and safe handling of clean water. Respondents indicated that in some areas students helped construct latrines and hand washing facilities in their homes, making their households models for the rest of the village.

The Learning by Doing Initiative selected only 10 schools to become WASH-friendly in the high intensity woredas, and only the health education workers in the catchment areas of those schools were trained in school-based hygiene promotion. As a result, very few HEWs interviewed in the high intensity districts reported participating in school-based hygiene and sanitation education activities, including latrine model demonstrations for students and community members. The HEWs' busy schedules are reported to be the major factor limiting their involvement in these activities.

Low Intensity Districts

Unlike funding in the high intensity districts, only some of the low intensity districts (e.g., Legambo and Artuma) reported that they were receiving support from donor agencies like ORDA, World Vision, USAID/CSPP, and UNICEF for school-based WASH programs. The support received included funding for the construction of latrines and water points within and for schools. Respondents also indicated that some school donor agencies like UNICEF have occasionally supplied soap for students. The school administration reportedly assumes the responsibility for enforcing the proper usage and maintenance of donor-supported school latrines and water points.

Unlike subdistricts in the high intensity areas, low intensity districts lack a software component in their WASH programs. For example, teachers have yet to be trained in hygiene and sanitation

promotion in the low intensity districts, even though HEWs operating in these areas may have received such training and are reportedly involved in school-based hygiene and sanitation promotional events.

Some schools from the low intensity districts also reported that they prepared model hygiene and sanitation units, which are often used to demonstrate WASH-related hardware to the students.

Respondents reported that some students who received information on WASH from the HEWs played an active role in promoting positive hygiene and sanitation behaviors like hand washing, latrine use, safe disposal of animal waste, and safe handling of clean water at the household level.

Finally, the lack of educational materials precludes teachers from further involvement in hygiene and sanitation promotion at school and in their own communities.

Table 20: Summary of Findings of School Assessment

	High Intensity Districts	Low Intensity Districts
Findings from qualitative interviews	Funding provided for school WASH hardware. Training provided for teachers, and acquired skills are being used. Model sanitation units set up for communities. In some areas students helped construct latrines and hand washing facilities in their homes. Few HEWs participated in the school activities primarily because of busy schedules.	Limited funding for school WASH hardware. No training for teachers to implement WASH software activities. The lack of educational materials precludes teachers from further involvement in hygiene and sanitation promotion at school. Some students who received information from the HEWs played an active role in promoting positive hygiene and sanitation behaviors. Model sanitation units set up.

School Survey Findings

The school survey findings compare baseline and endline data. The schools chosen do not represent the schools in the areas where they are located as they were selected based on the villages chosen for the household survey. A representative sample of schools would have required selecting the schools to be visited at random from the universe of schools in the region, but not enough funds were available to do a school sample separate from the household sample at the baseline or at the endline.

Table 20 presents findings concerning sanitation coverage in visited schools by measure. No statistical comparisons are offered for the reasons mentioned above. The data in the table indicate that schools visited come from the vast majority of all districts included in the sample. They also suggest that the average number of students in the schools visited in the baseline is larger than in the endline (938 vs. 720). Given that, the average number of boys and girls per school is also higher in the baseline than in the endline. The percentage of schools with gender specific latrines was higher in the baseline than in the endline. The ratio of boys per latrine squat hole is lower in the endline than in the baseline (484 vs. 423). The same is true regarding the ratio of girls (467 vs. 426). The ratios are below national standards, but are moving in the expected direction in terms of number of students per squat hole for both sexes.

Increases in the percentage of schools with hand washing stations near latrines when schools have gender specific latrines available were reported. As such, the percent increased from 5 percent to 21 percent in the case of latrines for boys and from 9 percent to 21 percent in the case of latrines for girls. However, these hand washing stations do not always have the necessary supplies to permit the practice of hand washing with a cleansing agent after visiting the toilet. Between the baseline and the endline, the availability of water increased from 2 percent to 12 percent for hand washing stations near latrines for boys and from 0 percent to 11 percent in the case of latrines for girls. And the availability of a cleansing agent, soap or ash, increased from 0 percent to 5 percent in the case of hand washing stations near latrines for boys and from 0 percent to only 2 percent in the case of hand washing stations near latrines for girls. Much remains to be done regarding conditions for hand washing in schools after visiting toilets/latrines.

The availability of drinking water and the source of drinking water for the school population remain unchanged between measures. A slight increase was recorded in the percentage of schools declaring they treated and stored drinking water. But in general the latter two remain considerably low between measures.

Table 21: Sanitation Coverage in Schools at the Baseline and the Endline (Ranges, means, and percentages when appropriate)

Variables		Baseline (n=78)	Endline (n=101)
Districts represented (absolute number)		20	14
Student enrollment (ranges or means)	Total population (ranges)	114 to 2,489	55 to 2,917
	Average student enrollment	938	720
	Average # of boys	NA	355
	Average # of girls	NA	364
Average number of administrative and teaching staff		21	16
Existence of latrines (percentages)	Any school	85	81
	Boys and girls (coed latrines)	17	22
	Gender specific latrines for boys	69	60
	Gender specific latrines for girls	69	60
	Administrative and academic staff*	37	34
Average number of students per latrine/squat hole	Boys	484	423
	Girls	467	426
Availability of hand washing stations near latrines for: (percentages)	Boys	5	21
	Girls	9	21
Availability of water at hand washing stations near latrines for: (percentages)	Boys	2	12
	Girls	0	11
Availability of soap/ash at hand washing stations near latrines for: (percentages)	Boys	0	5
	Girls	0	2
Availability of any hand washing supplies at hand washing station near the latrine for: (percentages)	Boys	2	12
	Girls	0	11
Availability of drinking water (percentages)		31	31
Source of water used for drinking	Protected source	27	27
	Unprotected source	4	4
Water treated before drinking		13	21
Drinking water is stored		1	4
Allowed to see storage container		NA	1

*The presence of staff latrines is relevant because in the absence of dedicated staff latrines, one or more stalls of student latrines is either used exclusively by staff or shared between staff and students.

Table 21 presents findings related to the observed characteristics of student latrines by gender and measure. Some of these indicators included in the table are available only for the endline data as the endline questionnaire was modified to collect more in-depth information on this topic. The comparable data between measures, however, indicates considerable increases in the cleanliness of latrines and the availability of latrines with protected entries between the baseline and the endline, regardless of gender. The presence of slabs in latrines across measures remains relatively constant.

At the endline, one-fifth or less of the slabs were broken, only around one-tenth of latrines had squat holes that would present risks to students, and not more than 15 percent of the superstructures were observed to be collapsing.

Table 22: Characteristics of Latrines (Percentages)

Variables		Baseline (n=55)	Endline (n=60)
Clean	Boys	24	56
	Girls	19	62
With protected entry	Boys	63	67
	Girls	49	75
With slab	Boys	95	92
	Girls	98	95
Is slab broken?	Boys		20
	Girls		13
Is squat hole too big presenting risk of sinking in?	Boys		11
	Girls		11
Latrine superstructure is collapsing	Boys		15
	Girls		8

Table 23 summarizes findings concerning the implementation of school-based software activities in support of hygiene promotion. This table is limited to the endline; when the baseline was conducted the school component of the Learning by Doing Initiative was not off the ground. The questionnaire used to conduct the endline survey included many in-depth details not considered in the baseline. Noteworthy are the linkages established between the health and education sectors concerning hygiene promotion. Sixty-two percent of the schools reported that health educators targeted the school population. The same is true for the integration of hygiene promotion into the school curriculum. Just over one-third of the schools reported that their teachers had been trained in hygiene promotion. The data also indicate that over half of the visited schools in the endline have active hygiene clubs, over one-fourth of the schools have PTAs that have implemented hygiene related activities, and over one-third of the schools have community outreach programs to promote hygiene.

Table 23: School-Based Hygiene Promotion Activities (Percentages)

Variables		Endline (n=101)
School has teachers trained in hygiene promotion		36
Teachers trained by Learning by Doing Initiative or its partners		19
Schools with hygiene and sanitation-related education integrated with the school curriculum		62
Curriculum materials used to support hygiene and sanitation education		19
Materials used were distributed by the Learning by Doing Initiative		11
Health or development agents conduct hygiene promotion activities at school targeting students		62
Observed hygiene promotion materials posted on walls/bulletin boards		22
Hygiene club for students active		53
Focus of hygiene club activities (several responses are possible)	Clean school grounds	38
	Promote hygiene in school	37
	Maintain latrines	24
	Promote hygiene off campus	19
	Build latrines	5
	Put water in hand washing stations	3
PTA active in WASH		26
Focus of WASH activities implemented by PTA (several responses are possible)	Maintain latrines	11
	Promote hygiene in school	10
	Promote hygiene in community	10
	Maintain sanitary facilities	8
	Put water in hand washing stations	3
	Clean school grounds	2
School conducts hygiene outreach activities		35`
Type of outreach activity conducted	Community dialogue	25
	Information sessions	10
Focus of school outreach activities (several responses are possible)	Hand washing with soap	31
	Household treatment of drinking water	21
	Household storage of drinking water	7

Table 24 breaks down by low and high intensity districts selected variables related to school-based hygiene promotion from the previous table to determine if investments and support from the Learning by Doing Initiative made a difference. These findings indicate that significant statistical differences exist in the expected direction regarding the presence of trained teachers in hygiene promotion, and in the fact that WASH materials used by teachers in the classroom

are those produced by the Learning by Doing Initiative. The involvement of the school PTA in WASH promotion is higher in the high intensity districts, and this difference almost reached statistical significance.

For all other variables considered, no statistically significant differences between the study groups were detected, including:

- The integration of hygiene promotion into school/curriculum classes
- The participation of health/development agents in hygiene promotion activities for students at school
- Whether the school hygiene club is active
- The organization of the school's hygiene promotion outreach

Table 24: School-Based Hygiene Promotion Activities at Endline by Study Group (Percentages)

Exposure Variables	Low Intensity Districts (n=71)	High Intensity Districts (n=31)	Chi2	p
School has teachers trained in hygiene promotion	24	66	15.4	.00
Teachers trained by the Learning by Doing Initiative or its partners	6	48	29.1	.00
Teachers integrate hygiene into school curriculum/classes	62	58	0.1	.44
Materials used in classroom work were distributed by Learning by Doing Initiative	6	23	6.4	.02
Health/development agents conduct hygiene promotion activities at school targeting students	62	61	.00	.56
Hygiene club for students is active	97	95	.10	.64
PTA active in WASH	21	39	3.3	.06
School organizes hygiene promotion outreach activities	31	45	1.9	.13

CONCLUSIONS AND IMPLICATIONS

Comparisons of baseline and endline findings at the **institutional level** suggest that:

- At the baseline, the high and low intensity districts were not much different when it came to aspects tracked, such as WASH teams just getting off the ground and not being fully operational, lack of coordinated planning, absence of a systematic approach to integrate software to hardware activities, etc.
- However, the high versus the low intensity districts showed differences in progress at the endline in the expected direction. That is, more coordinated planning was detected within the public sector agencies involved and between the public and the private sectors, when the latter is represented mainly by civil society. Donor agency coordination also seems to be present in the high intensity districts.

The impact of these changes on the ground and the implications of coordinated efforts related to access to protected water sources and hygiene and sanitation uptake at the household level may be in the early stages and could be potentially observable in the future. A more in-depth study is required to see what linkages may be occurring at this point between the institutional and the household components of the program.

At the **household level**:

- Substantial gains in sanitation coverage were recorded, and they could be linked to components of the behavior change strategy implemented by the initiative, essentially CLTS and follow-up household visits to negotiate sanitation options with families.
- Despite the significant drops in open defecation that were detected, the type of latrine being installed by families remains a challenge. The initiative intended for households to have access to sanitation facilities that met minimum standards. Compliance with those standards is not occurring, and the gains in simple latrine access may not qualify the Amhara region to achieve MDGs related to sanitation. The issue of the quality of latrines constructed needs to be addressed in future interventions, and an in-depth analysis of factors that lead families to move from open defecation, or from unimproved to improved sanitation, needs to be conducted.

HIP made an attempt to develop a logistic regression model to identify the predictors of improved sanitation adoption (like the predictors of latrine ownership model), however, this attempt did not bear fruit. This inability to determine relevant variables may have occurred because of the relatively low number of households with improved sanitation facilities.

Qualitative studies may help identify the variables that lead to improved sanitation, and the results of those studies may be integrated into future surveys.

The argument that a sanitation promotion program should include a sanitation marketing component to facilitate access to quality latrines and related financial products to make the purchase/install a latrine is partially substantiated by respondents' reasons for not having one. Baseline data concluded that the top five reasons for not having a latrine among open defecators are the following: not owning land/having space to construct a latrine (33 percent), absence of someone in the household to construct it (17 percent), other priorities (10 percent), no skills to build it (9 percent), and cost (4 percent).

If not carefully designed and monitored, sanitation marketing initiatives may help relatively wealthier families move up the sanitation ladder, rather than help the poorest of the rural poor to leave open defecation and establish an improved latrine in their household, as has been detected in other sanitation interventions elsewhere where HIP has been involved. Their design must be clearly thought out to benefit as many subgroups among the poor as possible. A two-tiered approach may be used to enable different groups to have access to financial assistance. Wealthier households may benefit from conventional loans, while lower socioeconomic households may benefit from solidarity group loans. Household surveys will be unable to determine which villages have reached open defecation free (ODF) status. A different methodology would be required to make that determination. Routine government monitoring systems were designed with the assistance of WSP/HIP and the multi-donor forum but have yet to be implemented to routinely collect such data. However, the question of whether all families in an ODF village have access to sanitation remains generally unanswered. Assessments conducted by WaterAid of their CLTS programs in eastern Africa have revealed that the most indigent households in ODF villages may not have latrines. To achieve 100 percent sanitation coverage the solidarity of other community members is important to help the poorest build their latrines. Future assessments should try to identify how many of the villages where CLTS activities have been conducted have become open defecation free, and within them, whether or not all households are latrine owners.

Hand washing promotion remains a challenge. Although the absolute number of hand washing stations at household latrines has increased, it has only kept pace with the growing number of latrines installed. As indicated in the report, the relative number of hand washing stations near latrines remained constant from the baseline to the endline. Community mobilization activities need to emphasize the importance of hand washing as ingestion of fecal matter may continue even when all households in a given village have latrines. If hands are not washed after defecation, the path for disease transmission is still in place. Additional research may be needed to understand what factors are preventing new latrine owners from setting up hand

washing stations at newly constructed latrines and ensuring that needed hand washing supplies are always available. Just as a village can be rewarded with an ODF label, an equivalent label for the installation of a hand washing station at latrines should be considered. Any hand washing incentive created needs to be associated with well supplied and functioning hand washing stations; without water and soap they are not functional.

Considerable gains were observed regarding the adoption of water treatment at the household level. Changes regarding appropriate household storage of drinking water seem to be going in the right direction, even if they are more limited. The changes observed must continue to be expanded and sustained.

At the **school** level:

School sanitation infrastructure must be expanded. The ratio of students per defecation squat hole continues to be very high and above national standards. More attention needs to be paid to the availability of functional hand washing stations near school latrines, and the differences observed in latrine cleanliness and maintenance must be sustained and expanded. The role of hygiene clubs and PTAs in this effort seems promising. The data collected through this survey regarding school-based hygiene promotion activities and events may be used as a baseline for similar assessments in the future.

ANNEX 1:

M&E FRAMEWORK OF THE LEARNING BY DOING INITIATIVE

Monitoring and Evaluation Framework for the Amhara Region "Learning By Doing" Program to Achieve Universal Hygiene and Sanitation

November 2008

Amhara National Regional State Health Bureau

Acknowledgements

The Amhara National Regional State Health Bureau would like to extend its gratitude to those common and uncommon partners who nurtured the process to prepare the Monitoring and Evaluation Plan for the Learning by Doing Initiative and their contribution in one way or the other to bring this plan to such a level where it can be easily referred to and applied.

First in the list are WSP-AF and USAID/ HIP, which stepped in and partnered with us to ignite at scale sanitation and hygiene in Amhara. In this regard we appreciate the contributions of Ato Belete Muluneh, Country Program Coordinator of WSP-AF; Andreas Knapp, Hygiene and Sanitation Specialist of WSP-AF; Ato Kebede Faris, WSP-AF; Katharina Welle, Research Officer, Overseas Development Institute; as well as Julia Rosenbaum, Deputy Director of USAID/HIP; and Orlando Hernandez, Senior M&E Officer of USAID/HIP. Without their diligent guidance the program in general and the Monitoring and Evaluation Plan in particular would have not reached such an appreciable standard.

Introduction

This document presents the revised draft version of the monitoring and evaluation framework for the Learning by Doing Initiative supported by the Water and Sanitation Program (WSP) and the Hygiene Improvement Project (HIP). As such, it suggests how these two collaborating partners intend to monitor the implementation of an at-scale hygiene and sanitation intervention in the region of Amhara. The framework is presented in a chart and is followed by a discussion on sampling issues for a household study that needs to be conducted to assess behavioral outcomes.

Components of the Conceptual Framework

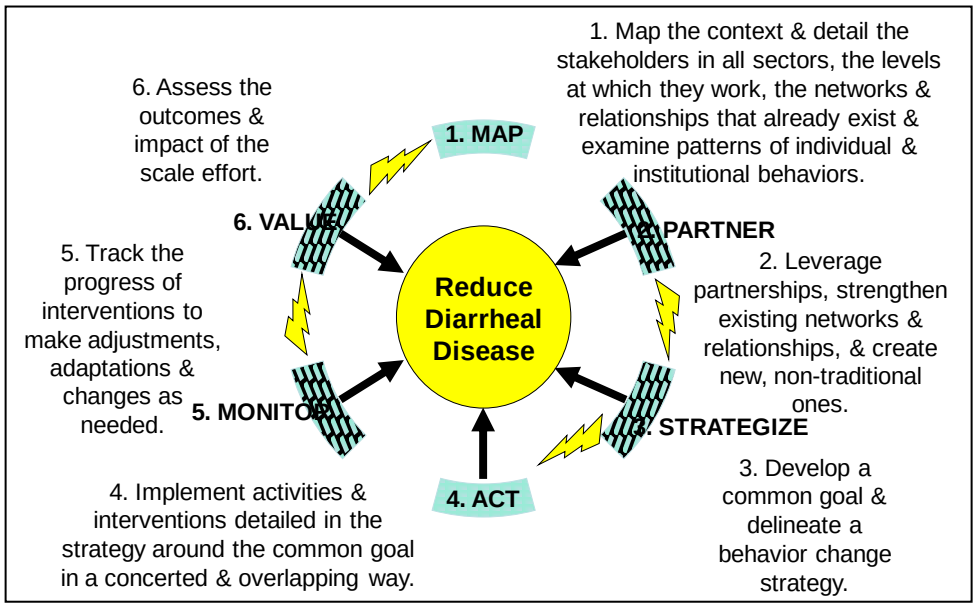
The Learning by Doing Initiative takes various levels of stakeholders through a process to ignite change at the regional, woreda, and community levels, bringing Amhara closer to goals of universal hygiene and sanitation by 2012.

It involves stakeholders in:

- Assessing the resource base and context
- Enhancing partnerships among and between stakeholder groups, as well as involving new, unlikely partners in sanitation
- Coordinating, strategizing, and planning to develop a Common Action Agenda
- Acting, which involves building regional, woreda, and local capacity to plan, budget, manage, and monitor the implementation of the Common Action Agenda, and carrying out more effective hygiene and sanitation improvement activities at the regional, district, community, and household levels
- Monitoring and evaluation, with necessary programmatic adjustments

The chart presented below summarizing the conceptual framework suggests that to achieve the overall goal of universal (or at scale) access to sanitation and hygiene, particular intermediate results will need to be reached in various domains:

At Scale Hygiene & Sanitation Improvement in the Amhara Region



- Results including increased institutional capacity
- Enhanced partnerships
- Improved woreda planning and intervention
- Behavior change at the community and household levels

It then lays out a set of indicators to measure inputs, outputs, and outcomes at each of those levels.

The chart is presented in four columns, one for each of the domains just listed. The reader will notice that the indicators associated with the two columns located to the right in the chart are more process and output oriented, while the indicators associated with the left two pillars are more outcome related.

Developing an evaluation framework for a comprehensive at scale approach is no easy task because it aims to lay out a simple structure for tracking a very complex series of interlocking activities. The framework suggests indicators to track “process”:

> What happened? What activities, programs, and initiatives were aimed at achieving the overall strategic objective?

The framework also attempts to capture changes in organizational relationships, and within organizations:

> What new strategic partnerships were formed as a result of the program’s inputs and activities? Are stakeholders working with more partners like them? Are they “bridging” to work with other stakeholders? Have they strengthened existing strategic partnerships? Are they sharing planning? Resources?

One important assumption of the framework is that it is intended to not only capture activities that have occurred to date, but also to help manage and assess investments in Learning by

Doing during at least a two-year period. The conceptual framework has been approved in principle by WSP and may be used to track activities beyond the involvement of the Hygiene Improvement Project.

The chart is organized around an approach called “results-based management,” used by many USAID and other donor-sponsored development projects in the recent past. The approach suggests that development assistance investments be designed to tackle a strategic objective, and to reach that objective certain intermediate results need to be achieved.

The conceptual framework chart is hierarchically organized from top to bottom. The strategic objective is on top, followed by the intermediate results that would need to be achieved for the strategic objective to occur, and each intermediate result is associated with a list of indicators to track progress. In fact, the intermediate results may also be considered as components for achieving the strategic objective, and the corresponding indicators would then be the indicators to track progress under each component.

A sequence of events is associated with the columns in the chart, as one reads the columns from left to right. It assumes that the partnership being supported by the Learning by Doing program needs to be fostered, and that such fostering would imply having the needed legal framework that would permit its creation and development. It would require not only the legal framework, but also a practical structure that would facilitate implementation, as well as resources to carry out projects at different levels; such resources can be leveraged from different partners in support of the partnership**. (Column 1)**

As the partnership gets created and fostered, the implementation capacity of involved partners needs to be strengthened in those areas where institutional development is in fact needed, e.g., behavior change, planning, budgeting. An initial step in the development of institutional capacity, apart from deciding what needs to be strengthened, is the generation of strategies, manuals, and guidelines that can facilitate the process. In turn, the documents need to be used to design and implement training activities to build knowledge and specific competencies. The framework captures the production and use of these documents; the number and type of capacity building events; increased capacity resulting from these events; and increased activities applying new competencies and approaches (like negotiating improved practices in hygiene and sanitation). **(Column 2)**

The implementation of activities requires a roll out at the woreda level, and there are 148 woredas in Amhara. Scale has a geographic dimension (change requires reaching across a significant geographic range, among other characteristics), so achieving scale requires an expansion of geographic roll out. Imagine lights being lit to illuminate the sky at night. The evaluation framework tries to capture this dimension of replication and expansion **(Column 3).** It is important to point out, however, that the Learning by Doing Initiative intends to focus on one woreda initially, rolling out to six additional in the first year, and having the program operating in 10 woredas total by the end of FY 08. If possible, additional implementing partners may be brought on board to extend the reach of the program. The involvement of the partners may be limited to certain aspects of the program.

Lastly, all this planning, training, institutional strengthening only matters, if in the end, communities and households improve their specific sanitation and hygiene behaviors:

- Increased hand washing with soap or substitutes
- Improved water handling from source to mouth
- Increased (introduction of) household water treatment
- Improved feces disposal, adult and child

Column 4 includes a streamlined set of indicators to measure this at the household, institutional, and community levels. This approach has been developed with the current and proposed regional and woreda-level monitoring systems in mind, with the hope that great harmonization of indicators can be promoted. Specifically, this would mean that Column 4, in particular, reflects water, sanitation, and hygiene indicators currently used by different government partners at the regional and woreda levels, though in a more streamlined format. It is recommended that the indicators are revisited and streamlined regularly so they truly serve as "indicators" rather than as a comprehensive list of measurements.

Data Collection at the Household Level

For efficiency, economy, and sustainability, HIP considered piggybacking the household data collection onto ongoing activities. For this purpose, it explored relying on:

- The monitoring implemented by the MOH via the health education workers (HEWs) and local volunteers operating at the kebele level
- The data collection efforts by potential partners such as the NGOs affiliated with the Millennium Water Alliance network, programs such as ESHE, etc.

Looking for collaboration with such partners in data collection at the household level may prove to be inappropriate for different reasons mainly associated with: reliability, timeliness, or level of coverage of the data collected by partners.

In the specific case of the MOH's HEWs, two issues need to be taken into account. One, a recent assessment of the data collection mechanisms from the different sectors involved suggests that the data collection via HEWs may be limited to only half of the woredas in the Amhara region. It is difficult to determine how these woredas compare to those where the system has not rolled out yet. And two, data may prove to be unreliable for baseline and evaluation purposes. The system relies on an initial inventory of hygiene practices developed by HEWs in their jurisdiction. The whole universe of households in these jurisdictions is assessed. However, regular updates of progress are based on data collected by village health workers, who are untrained volunteers that do not usually rely on data recording instruments, and the reporting may occur orally. Much training and supervision of all parties involved would be required for this data collection process to become efficient and reliable for evaluation. The improvement of such a monitoring system is in fact an important development activity supported by WSP/HIP through RiPPLE. However, it may prove to be time consuming, and a baseline at

the household level may not be available when needed. And yet, sample selection could only occur from half of the woredas for reasons mentioned above.

Other projects and NGOs operate in Amhara districts that may not necessarily be targeted by the Learning by Doing roll out. For example, the ESHE project works in 20 districts in Amhara, and the NGOs affiliated with the Millennium Water Alliance operate in two additional districts. These may be different districts than those possibly involved in the roll out exercise. Even if they were, the data collection activities at the household level are not likely to happen in the near future. For example, future data collection activities in the ESHE districts may happen down the road in the next 18 months.

The only alternative is to implement a household survey with the specific purpose of reporting to implementers and donors of the Learning by Doing Initiative. Households should be randomly selected from three types of districts.

What is proposed is the use of a comparison design with different levels of intensity of the intervention. No true control districts exist given the fact that there is some level of presence by different partners, particularly from the public sector, throughout the region. Yet, the intention is to select districts at random, kebeles, gotts, and eventually households from the three categories proposed above. It is suggested that at least two measurements be conducted, one prior to the roll out and one at least one year later. The research question guiding the design is whether the program implemented made a difference in behavioral outcomes. Keeping the lower levels of intensity in the design will help rule out alternative explanations for changes in behavioral outcome variables that may be observed.

HIP recommends the adoption of a cluster sampling approach proportionate to size, as households located in both larger towns (e.g., kebele main centers) and rural areas should be assessed. The sample size should also be sufficiently large to permit data analysis by location (larger towns by rural areas) and hygiene promotional strategy adopted. The Learning by Doing Initiative proposes the use of three mechanisms to influence demand and hygiene practices: community-led total sanitation, school based promotional efforts, and individual negotiation with households implemented via HEWs or community health workers. The three different mechanisms may not be adopted by all WASH partners. Thus, the influence of the different promotional strategies needs to be examined.

More specifically, there are 150 woredas in Amhara. They will be classified into three strata. The numbers in parentheses next to each category reflect the number of categories in each stratum:

1. High direct involvement (3)
2. Low direct involvement (8)
3. Indirect involvement woredas (139)

The high direct involvement woredas are those receiving the greatest support from WSP/HIP for hygiene promotion. These are the woredas where the intervention would be implemented the longest and where the Learning by Doing Initiative expects to yield the highest impact in the

earlier phases of program implementation. Woredas falling into this category are: South Achefer, North Gonder, and South Wollo.

The low direct involvement woredas are those in which donor funds will also be made available to implement hygiene promotion. The initial training imparted by WSP/HIP in the high involvement woredas will be replicated here. This replication will be the responsibility of the trainers trained directly by WSP/HIP.

The high involvement and the direct involvement woredas are also known as “ignition” woredas. There is one ignition woreda per zone.

During the period of October Year 1 through September Year 2, about one-fourth of the kebeles in the 11 direct involvement woredas will receive intensive support. These kebeles are also defined as “ignition” kebeles.

Indirect involvement woredas are those where development assistance agencies emulate/replicate (a) the BC and M&E training and (b) interventions introduced by WSP/HIP in the direct involvement woredas. The responsibility for hygiene promotion in the indirect implementation woredas may be in the hands of NGOs, and hygiene promotion funding may come from such organizations as the Carter Center, ESHE, ORDA, etc. In these woredas, NGO hygiene promotion efforts will be complementary to those implemented by public sector organizations.

The variable selected to make the sample calculation is presence of a sanitary facility in the household. Based on the CSA data for rural Ethiopia, it is expected that the sanitation coverage in ignition woredas and kebeles in Amhara is equal to 17 percent, and the sample chosen should be able to reflect that same figure. A plus or minus 5 percent precision is tolerated. Homogeneity within cluster was set at 0.4 and the design effect at 3.0.

Six hundred sixty cases will be selected from each one of these strata using a cluster sampling approach. In each of the strata, there will be 110 clusters and six households per cluster selected at random. For the purpose of this solicitation, a gott will constitute a cluster. Households will be selected from the ignition kebeles in the ignition woredas. However, households may be selected from any kebele in the indirect involvement woredas.

The self dedicated household survey will be jointly funded by HIP and WSP. A chart indicating the proposed indicators by the Intermediate Results (IR) follows.

Conceptual Framework for M&E Plan for Learning by Doing Initiative in the Amhara Region

					Reach scale of hygiene and sanitation activities in Amhara Region							
Strategic Objective												
Intermediate Results		Partnerships to facilitate coordinated action at regional and district levels fostered			Institutional capacity among public sector and civil society partners to implement WASH program developed			Hygiene and sanitation program at woreda level expanded			Adoption of hygiene practices or their antecedents at the household and institutional levels increased	
Illustrative Indicators		# national, regional or district level policies, strategies, programs and projects advanced through WSP/HIP involvement or leadership (1)			# of strategies/guidelines developed to formulate inter-institutional agreements, define work plans, and behavior change and M&E activities pertaining to hygiene and sanitation at different administrative levels (6)			% of targeted woredas that implemented WSRs (11)			% of households using improved sanitation facilities meeting minimum standards by woreda (15)	
								% of targeted woredas with joint WASH plans stimulated by woreda WSRs (12)				
											% of hw stations near improved sanitation facilities meeting minimum standards with appropriate hw supplies by woreda	

positions modified/created to support partnership and at-scale activities (2)

% of trainees mastering knowledge/skills per newly developed guidelines by institutional affiliation and topic of training (7)

implementing collaborative actions between implementing partners (13)

(16)

% of caretakers washing their hands with cleansing agent during 2 critical junctures (17)

# of woredas developing integrated annual plans developed with contributions from all relevant partners (3)

% of targeted woredas implementing integrated hygiene promotion actions to complement hardware investments (14)

% of trained teachers using newly introduced hygiene materials (8)

% of targeted households with improved latrines practicing required infra and super structure maintenance by woreda (18)

Amount of funds leveraged from donors/NGOs to support hygiene and sanitation at scale in Amhara Region (4)

% of trained household visitors/health promoters in targeted woredas/kebeles applying BC and M&E tools introduced via WSP/HIP training activities (9)

% of households targeted practicing effective household water treatment by woreda (19)

# of institutional partners showing increasing collaboration by new and strengthened linkages with other organizations (5)

% of annual budget spent by targeted woredas (10)

% of targeted households practicing effective drinking water storage by woreda (20

% of woredas/ kebeles receiving award(s) for

											completion of sanitation/hygiene targets (21)
											% of water user committees with women as treasurers (22)
											% of students with increased knowledge of promoted hygiene practices by woreda (23)
											% of targeted schools complying with child/latrine ratio defined by the National Protocol for Hygiene and Sanitation (24)
											% of targeted schools with water supply (25)
											% of targeted schools with hw stations that have running water and cleansing agent (26)

Wheel Element		MAP, STRATEGIZE AND PLAN		ACTING		M&E

ANNEX 2:

BREAKDOWN OF DISTRICTS BY MEASURE

Breakdown of Zones, Districts, and Subdistricts at the Baseline[6]

Zone	District (Woreda)
Awi	Shekodod Ankasha
Bahar Dir	Bahir Dar Town
	Tis Abay
East Gojam	Debre Elias
	Dejen
North Gondar	**Gondar Zuria**
	Takussa
North Showa	**Kewet**
	Debre Birhan Town
North Wollo	Mekit
	Lasta
Oromia	Artuma
	Dawa Chefa
South Gondar	Dera
	Ebenat
South Wollo	Kutaber
	Tehuledere
Wag Himera	Dehena
	Sekota
West Gojam	**South Achefer**
	Jabitena

[6] High intensity districts appear in red font.

Breakdown of Zones, Districts, and Subdistricts at the Endline[7]

Zone	District (Woreda)
Awi	Guangua
East Gojam	Hulet Eje Enese
North Gondar	**Gondar Zuria**
	Metema
North Showa	**Kewet**
	Menz Mama Midir
North Wollo	Lasta
Oromia	Artuma
South Gondar	Misrak Este
South Wollo	Legambo
	Tehuledere
Wag Himera	Abergele
West Gojam	**South Achefer**
	Gonje and Colel

[7] High intensity districts appear in red font.

Annex 3: Data Collection Instrument

Interview Guide

for

Kebele and Woreda Level Respondents

"Learning by Doing Initiative Generic Household Survey, Institutional Performance and School Assessment in Amhara, Ethiopia"

Interview Guide

Note: This is an instrument used to interview separately members of the Woreda WASH Team, including representatives from the from health, education and water desks at the woreda level. It was also used to interview similar officers at the kebele level.

Software Activities in Support of Hardware Investments

1. What water infrastructure projects exist in this woreda/kebele?
2. To what extent is hygiene and sanitation improvement (promotion/behavior change) implemented in your woredas/kebeles? To what extent are such promotional efforts integrated with supporting infrastructure investments in water and sanitation in your woreda/kebeles?
3. How is construction of water, sanitation and hygiene infrastructure, if any, integrated with aspects such as training, awareness creation, promotion, demand generation for hygiene and sanitation in your woreda/kebeles?

Note: If there are no such activities integrating hardware and software despite investments in hardware, explore the reasons for their absence using Questions 4 and 5.

4. What do you think the reasons for the non-integration of hard and software components of hygiene and sanitation programs?
5. What problems do you believe are there that prevent the two from going together?

Note: If there are any software activities to support infrastructure investments, explore what is being done and use the following type of questions.

6. What are the objectives of hygiene and sanitation improvement in the Woreda /Kebele?
7. What are the major behavior change interventions in your locality? Are some or all the interventions part of other activities (community-led total sanitation initiative, negotiation initiatives where individual households can select the technology that best fits to their needs and resources, school-based community outreach activities)?
8. What approaches are used to:

- promote hygiene and sanitation improvement?
- increase the installation of latrines?
- promote hand washing at important moments to reduce diarrheal disease?

9. How do you do your planning for sanitation and hygiene?
10. Is it different from other health/environment/education planning that you do?

Community-Led Total Sanitation and Behavior Change

11. What are the major means you use to CHANGE HYGIENE AND SANITATION BEHAVIORS in your community?
12. Who specifically is responsible for delivering hygiene and sanitation messages to communities and households?
13. Which organizations are involved in the implementation of hygiene and sanitation behavior change?
    - How well are they doing?
    - How are community members responding?
14. What materials are usually (commonly) used? Are there any job aids? Can you show them to me?
15. Can you tell me the major achievements you have seen since this type of activity started being implemented?
16. Which institutions are being more successful?
17. What do you attribute their success to?

Training

18. Was your staff trained in hygiene and sanitation behavior change? When? Who was trained? Was this most of your outreach staff, about half, some? About what percent of your field staff was trained?
19. Who brought this training?
20. How is that training being used?
21. What support has your office provided to the health extension workers to implement any hygiene and sanitation improvement activities to increase sanitation uptake by families?
22. What problems have you encountered trying to make the intended support for hygiene promotion materialize?

Use of WSP/HIP/ABH M&E Materials

23. Have you or any other person been trained on the use of the M&E tools? Who? How many people? From which institutions?
24. Do you have any copies of these tools available? Can you please show them to me?
25. How do you evaluate the tools? Are they good enough to reflect the realities on the ground? Are they reliable and easy to manage?
26. What benefits have been gained since starting to use the tools? Could you please explain?
27. How effectively have the tools been used by the different partners working in the woreda / kebele?
28. What shortcomings or strengths do the tools have? Could you explain?
29. Do you apply the M&E tools introduced by WSP/HIP?
30. How effective is the promotion in achieving its set objectives?
31. Do you have any results after using those tools that you want to share with me?

WSRs/Coordination/Joint Planning

32. Have you ever heard the term WSR (Whole System in a Room)?
33. What does the term mean to you?
34. Have you participated in any WSR? When, where? What was/were the purpose?
35. What major events to initiate the coordination of institutional cooperation in the area of water and sanitation have occurred in your woredas/kebeles since 2000 (Ethiopian Year or since 2008 in Western calendar)?
36. Have you heard of the PATHWAY TO TOTAL BEHAVIOR CHANGE IN HYGIENE AND SANITATION?
37. What are the major steps in the pathway?
    - Do you have the Woreda Resource Book here to show me that outlines the pathway?
    - Let's look at the pathway together… which of the steps do you think you actually followed? Where are you now?
    - Did you refer to this document at all in your planning and implementation of hygiene and sanitation improvement activities?
38. Do you have any other guidance documents that help you in your hygiene and sanitation improvement efforts?
39. What major activities related to the actual coordination with other development partners in the area of hygiene and sanitation have been carried out in the woreda in 2010?

40. Which institution has taken the leading role, why?
41. What role have other partners played?
42. What role does your own organization play in this coordination effort?
43. How do you coordinate with other institutions? If any, which ones? What type of coordination is implemented?
44. Which crucial partners that should be part of these activities are not currently involved in the implementation of these activities? Has there been any breakdown of the work to be done in the area?
45. Does such coordination lead to the development of actual joint work plans across institutions?
46. What attempt (s) was/ were made to establish joint planning exercises? Who made the attempt?
47. Did this attempt succeed or fail?
48. Why do you think the attempt succeeded/failed (depending on what happened)?
49. What are the achievements you have seen of any joint planning efforts, if any?
50. Who is less interested in such joint planning practices?
51. What measure do you believe should be taken to strengthen or overcome the observed weakness of joint planning, if any?
52. What benefits do you believe could be gained with the introduction of joint planning exercises?

Role of Schools

53. What role are schools now playing in promoting hygiene and sanitation?
54. What types of activities are implemented in this regard?
55. When did they start?
56. How are they received by the community?
57. Are there any observable achievements of these efforts?

Learning by Doing Initiative

Implemented by WSP and the USAID Hygiene Improvement Project

Household Survey

Generic Questionnaire

Consent Form:

The regional government would like to improve the living conditions of residents in your community. To be able to do this, however, we need your help to learn about family activities that impact health. We would like to talk with the person in your family who is responsible for taking care of children under 5 living in your house. The information we collect during this interview will be entirely confidential and will not ask for the names of no one interviewed. Also, when the results of all of the interviews are combined, we will not identify specific individuals with any of the information collected. The information you provide will help government offices develop better programs to address the water and sanitation issues faced by your family and your community.

(Please circle the category that describes the decision made by the respondent.)

Consent granted_____

Consent refused_____

(01-11) - Identification

NO.	QUESTION	CODING CATEGORIES	SKIP
01	Sex of respondent	Female…… 1 Male…… 2	
02	Date of Interview	____Day ____Month	
03	Code of the Interviewer		
04	Interviewer Sampling Stratum	High Direct Involvement…… 1 Indirect Involvement…… 2	
05	Name of village/clustery *(Write name directly)*		
06	Name of Kebele *(Write name directly)*		
07	Name of Woreda	Dawa Chefa …… 1 Debre Elias …… 2 Dembia …… 3 Fageta Lekuma …… 4 Gonder Zuria…… 5 Kalu …… 6 Kewet …… 7 Lebo Kemkem …… 8 Mecha …… 9 Meket …… 10 Sekota …… 11 South Achefer …… 12 Tehuledre…… 13 Tis Abay …… 14	
08	Name of Zone	Awi …… 1	

		Bahir Dar Zuria…….. 2 East Gojam…….. 3 North Gonder…….. 4 North Showa…… 5 North Wollo…… 6 Oromia…… 7 South Gonder …… 8 South Wollo…….. 9 Wag Himera …….. 10 West Gojam…….. 11	
09	Supervisor		
010	Date questionnaire reviewed	____Day ____Month ___Year	
011	Entered by (Code of the data entry Clerk)		

(100) - Observations of Dwelling Characteristics

NO.	QUESTION	CODING CATEGORIES	SKIP
101	**(OBSERVE)** What type of dwelling are you visiting?	House located in a separate compound …….. 1 House located in a communal compound …….. 2 Other (specify)_____ 3	
102	**(OBSERVE)** What is the material for the walls of the main living area?	No walls …….. 1 Cane/trunk/bamboo/reed…… 2 Bamboo/wood with…….. 3 Stone with mud…… 4 Uncovered adobe…….. 5 Plywood…….. 6 Carton…….. 7	

		Cement…… 8 Stone with lime…… 9 Bricks…….. 10 Cement blocks…….. 11 Other (specify)_____ 12	
103	**(OBSERVE)** What is the material for the roof of the main living area?	Thatch/leaf…… 1 Rustic mat/plastic sheets…… 2 Reed/bamboo…….. 3 Wood planks…… 4 Corrugated iron…….. 5 Wood…….. 6 Calamine/cement fiber…….. 7 Cement/concrete…… 8 Other (specify)_____ 9	
104	**(OBSERVE)** What is the material for the floor of the main living area?	Earth/sand…… 1 Dung…… 2 Wood planks…… 3 Reed/bamboo …… 4 Polished wood …… 5 Vinyl …….. 6 Ceramic tiles …….. 7 Cement brick …….. 8 Other (specify)_____ 9	

We are here to talk about different activities in your household. Let's first start with some of the characteristics of the family.			
105	How many people live permanently in your house?	***(Write in the number*.)** ☐☐	
106	How many of those are boys under 5 years of age?	☐	
107	And how many are girls under 5 years of age?	☐	
108	Who in the household is responsible for taking care of those children under the age of 5?	Respondent Respondent's mother in law Sibling of children Other (specify) _____	
109	How old are you?	☐☐☐☐ ***(Write directly the age)***	
110	Did you ever attend school?	No…….. 1 Yes…….. 2	→112
111	What was the last grade of school that you completed? *(Write in the number)*	☐☐	

112	Can you read and write?	Yes I can read and write …….. 1 Yes I can read but not write…….. 2 No I cannot read and write …….. 3	
113	How many rooms in your house are used for sleeping?	_____	
114	How many family members bring income to this family? *(Write directly the number reported)*	_____	
115	Are you currently employed?	No……. 1 Yes…… 2	→ 117
116	Do you work in agriculture?	No……. 1 Yes…… 2	
117	Does your household have *(Read choices and circle answer provided)*	No Yes Electricity…….. 1…… 2 Radio……. 1…… 2 Television…….. 1…… 2 Telephone…….. 1…… 2 Electric mitad (for cooking injera)…… 1…… 2 Kerosene lamp…….. *1*…… 2	
118	Does your household	No Yes Own the house you live in…… 1…… 2 Own crop land…….. 1…… 2 Own cattle/camels…… 1…… 2 Own horses, mules or donkeys…… 1…… 2 Own sheep/goats…….. 1…… 2	

		Grow cash crops……..	1……	2	
119	Does any member of your household own:		No	Yes	
		A bicycle?.....	1……	2	
		A motorcycle or scooter?……..	1……	2	
		A car or truck?.....	1……	2	
		A horse or mule for……..			
		Human transport only?……..	1……	2	

(200) - Drinking Water

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	What is (currently) the main source of drinking water for your family?	Piped water into dwelling…….. 1 Piped water from a neighbor……. 2 Piped water into yard/plot…….. 3 Public tap/standpipe…… 4 Tube well or borehole……. 5 Protected dug well…….. 6 Unprotected dug well…….. 7 Water from protected spring…… 8 Water from unprotected spring …….. 9 Rainwater…….. 10 Tanker truck……. 11 Cart with small tank…… 12 Surface water (River/dam/lake/ponds/stream/canal/irrigation channel) …….. 13 Bottled water…… 14 Other (specify) _____ 15	

202	Who is responsible for the provision of water at your main source?	Does not know……. 1 Government authority ……. 2 Water committee ……. 3 NGO ……. 4 Private operator/vendor…….. 5 Household wells…….. 6 Rainwater…….. 7 Surface water…… 8 Other (specify) _____ 9	
203	How long does it take to go there, get water, and come back?	Minutes: ☐☐ On premises .....…….. 1	

204	What are the other sources (other than you use for drinking water) of water you use for other purpose?	Piped water into dwelling……..... Piped water from a neighbor……. Piped water into yard/plot…….. Public tap/standpipe…… Tube well or borehole……. Protected dug well……..... Unprotected dug well…….. Water from protected spring…… Water from unprotected spring …….. Rainwater…….. Tanker truck…… Cart with small tank…… Surface water (River/dam/lake/ponds/stream/canal/irrigation channel) …….. Bottled water…… Other (specify) _____	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	
205	Do you get water from your main source throughout the year?	No…… Yes……	1 2	→ 208

206	What other source of drinking water do you use when the main source does not have sufficient water? (Seasonal or intermittent)	Piped water into dwelling……..... Piped water from a neighbor……. Piped water into yard/plot…….. Public tap/standpipe…… Tube well or borehole……. Protected dug well……..... Unprotected dug well……. Water from protected spring…… Water from unprotected spring …….. Rainwater…….. Tanker truck……. Cart with small tank…… Surface water (River/dam/lake/ponds/stream/canal/irrigation channel) …….. Bottled water…… Other (specify) _____	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	
207	Who controls the provision of water at this source?	Does not know……. Government authority …….. Water committee …… NGO ……. Private operator/vendor…….. Household wells…….. Rainwater……..... Surface water…… Other (specify) _____	1 2 3 4 5 6 7 8 9	
208	Do you sometimes change sources of drinking water to access water that is less expensive?	NO .....…… YES…….....….....	1 2	→ 300

209	Who provides that less expensive water?	Does not know…….. 1 Government authority …… 2 Water committee ……..... 3 NGO ……. 4 Private operator/vendor…… 5 Household wells……..... 6 Rainwater……..... 7 Surface water……. 8 Other (specify) _____ 9	

(300) - Drinking Water Storage

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
300	Do you store drinking water?	NO ..... …… 1 YES..... …….. 2	→313
301	How do you store drinking water, in what kinds of containers?	No water stored……. 1 Bucket…… 2 Drums…… 3 Jerry cans…… 4 Wide mouth insira…… 5 Narrow mouth insira……. 6 Roof tank or cistern…….. 7 Other (specify)_____ 8	
302	If in containers, may I see the containers, please?	NO ..... …… 1 YES..... …….. 2	→313

303	Who decided to use these containers?	Wife…….. 1 Daughter…… 2 Husband……. 3 Son……. 4 Somebody else (specify)_____ 5	
304	**(OBSERVE)** Count how many containers are used for storing drinking water and write down the number.	**Number of containers** ☐	
305	**(OBSERVE)** What is the estimated amount of water in liters stored per container?	**Container 1** ☐ **Container 2** ☐ **Container 3** ☐ **Container 4** ☐	
306	**(OBSERVE)** What types of containers are these? Observe and check all that apply. Narrow mouth opening is 3 cm or less.	Clay pot with narrow mouth……. 1 Clay pot with wide mouth …….. 2 Clay pot both types …….. 3 Jerry can …….. 4 Other (specify)_____ 5	

307	(**OBSERVE AND CHECK)** Are drinking water containers covered in any way?	None are …….. 0 All covered with hard covers…… 1 Some covered with hard covers……. 2 All covered with soft covers such as piece of cloth…. 3 Other (specify)_____ 4	→ 308
307 A	If containers are covered with hard covers, are covers tight fitting?	All covers are tight fitting ……..…….. 1 Some covers are tight fitting…….. 2 None are tight fitting…… 3	
308	**(OBSERVE)** Do drinking water containers have a tap?	None do…. ..…… 0 Yes, all do…..…….. 1 Some do and some do not……..…….. 2	
309	**(OBSERVE)** Is drinking water storage container cracked?	NO (all are ok) ... …….. 1 YES (some are cracked)…… 2 YES (all are cracked) . …… 3 Other (specify)_____ 4	
310	**(OBSERVE)** Is water container located in area accessible to animals in the house (cats, dogs, poultry) where animals can reach in?	NO …… 1 YES..... …….. 2	
311	**(OBSERVE)** Is water container located in an area accessible to children where children can reach in?	NO ..... …….. 1 YES..... …….. 2	
312	Please show me how you draw the water from the drinking water storage container?	Pour…… 1 Ladle hung on wall……..…… 2 Ladle inadequately placed……. 3 Cup stored on wall or clean surface…….. 4 Cup without adequate handle or on floor…….. 5 Other (specify) _____ 6	
313	Do you do anything to your drinking water to make it better for drinking?	Store in a clay pot…….. 1 Add local herbs for aroma…… 2 Strain to remove dirt/leaves/particles…… 3	

314	Do you do anything to make it safer for drinking?	NO ..... …… 1 YES..... …….. 2	→ 316
315	What do you do?	Wuha Agar…….…… 1 Boiling…….…… 2 Local herbs…….. 3 Alum…….…….. 4 Strain to remove dirt/leaves/particles…… 5 Other (specify)_____ 6	
316	Do you know any ways to make water safer for drinking?	NO ..... …… 1 YES..... …….. 2	
317	Which ones do you know? *(Record all the ones that are mentioned. More than one answer may be provided.)*	Wuha Agar…….. 1 Boiling…….. 2 Local herbs…… 3 Strain to remove dirt/leaves/particles…… 4 Alum…….. 5 Other (specify)_____ 6	

(400-414) - Soap and Other Cleaning Materials

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		Soap	
400	Is it common to use soap in the household?	NO…….. 1 YES…….. 2	
401	Do you have any type of soap in your house right now?	NO…….. 1 YES…….. 2	→403

402	Who in the family decided to buy the soap?	Wife…….. 1 Daughter…… 2 Husband…….. 3 Son……. 4 Somebody else (specify)_____ 5	
403	Did you use soap at anytime yesterday morning?	NO ..... …… 1 YES..... …….. 2	→407
404	The first time you used soap yesterday, what did you use it for? If for washing mine or my children's hands is mentioned, probe what was the occasion, but do not read the answers.	Washing clothes…… 1 Washing my body ……..... 2 Washing my children …….. 3 Washing child's bottom…… 4 Washing my children's hands…… 5 Washing my hands after defecating …….. 6 Washing my hands after cleaning a child's bottom… 7 Washing my hands before feeding a child…….. 8 Washing my hands before preparing food……. 9 Washing my hands before eating…… 10 Other (specify) _____ 11	
405	Did you use soap at any other occasion yesterday?	NO ..... …… 1 YES..... …….. 2	→407

406	What did you use soap for on the next occasion? If for washing mine or my children's hands is mentioned, probe what was the occasion, but do not read the answers.	Washing clothes…… 1 Washing my body ……..... 2 Washing my children …….. 3 Washing child's bottom…… 4 Washing my children's hands…… 5 Washing my hands after defecating …… 6 Washing my hands after cleaning a child's bottom…… 7 Washing my hands before feeding a child……. 8 Washing my hands before preparing food……. 9 Washing my hands before eating…… 10 Other (specify) _____ 11	
407	For what purpose do you commonly use soap?	Washing clothes…… 1 Washing my body ……..... 2 Washing my children …….. 3 Washing child's bottom…… 4 Washing my children's hands…… 5 Washing my hands after defecating …… 6 Washing my hands after cleaning a child's bottom…… 7 Washing my hands before feeding a child……. 8 Washing my hands before preparing food……. 9 Washing my hands before eating…… 10 Other (specify) _____ 11	

	Ash		
408	Have you ever used ash for hand washing?	NO…… 1 YES……..... 2	→**419**
409	Did you use that type of ash at anytime yesterday morning?	NO ..... …… 1 YES..... …… 2	

410	The first time you used ash yesterday, what did you use it for? If for washing mine or my children's hands is mentioned, probe what was the occasion, but do not read the answers.	Washing clothes…… 1 Washing my body …….. 2 Washing my children …….. 3 Washing child's bottom…….. 4 Washing my children's hands…….. 5 Washing my hands after defecating …….. 6 Washing my hands after cleaning a child's bottom… 7 Washing my hands before feeding a child…….. 8 Washing my hands before preparing food…….. 9 Washing my hands before eating…… 10 Other (specify) _____ 11	
411	Did you use ash at any other occasion yesterday morning?	NO ..... …… 1 YES..... …….. 2	→419
412	What did you use ash for on the next occasion? If for washing mine or my children's hands is mentioned, probe what was the occasion, but do not read the answers.	Washing clothes…… 1 Washing my body …….. 2 Washing my children …….. 3 Washing child's bottom…….. 4 Washing my children's hands…….. 5 Washing my hands after defecating …….. 6 Washing my hands after cleaning a child's bottom…… 7 Washing my hands before feeding a child…….. 8 Washing my hands before preparing food…….. 9 Washing my hands before eating…… 10 Other (specify) _____ 11	
413	Did you use ash any other time yesterday?	NO ..... …… 1 YES..... …….. 2	→419

414	What for? If for washing mine or my children's hands is mentioned, probe what was the occasion, but do not read the answers.	Washing clothes…… 1 Washing my body ……..... 2 Washing my children …….. 3 Washing child's bottom…… 4 Washing my children's hands…… 5 Washing my hands after defecating ……. 6 Washing my hands after cleaning a child's bottom…… 7 Washing my hands before feeding a child……. 8 Washing my hands before preparing food…… 9 Washing my hands before eating…… 10 Other (specify) _____ 11	

(419-431) - Hand Washing /Where Does Family Wash Hands?

419	Yesterday, how many times did you use soap to wash your hands?	_____ (Frequency in number)	
420	For what purpose did you use soap to wash your hands then? *(Record all occasions, if more than one is mentioned)*	Washing clothes…… 1 Washing my body …….. 2 Washing my children …….. 3 Washing child's bottom…….. 4 Washing my children's hands…….. 5 Washing my hands after defecating …….. 6 Washing my hands after cleaning a child's bottom…… 7 Washing my hands before feeding a child…….. 8 Washing my hands before preparing food…….. 9 Washing my hands before eating…… 10 Other (specify) _____ 11	
421	Yesterday, did you use ash to wash your hands	NO ..... …… 1 YES..... …….. 2	→422 b
422	Yesterday, how many times did you use ash to wash your hands?	_____ (Frequency in number)	

422a	For what purpose did you use ash to wash hands? *(Record all occasions, if more than one is mentioned.)*	Washing clothes…… 1 Washing my body …….. 2 Washing my children …….. 3 Washing child's bottom…… 4 Washing my children's hands…… 5 Washing my hands after defecating …….. 6 Washing my hands after cleaning a child's bottom… 7 Washing my hands before feeding a child……. 8 Washing my hands before preparing food……. 9 Washing my hands before eating…… 10 Other (specify) _____ 11	

422b.	I am going to read to you different circumstances when people may wash their hands and you will tell me during which ones do you ever wash your hands. For each one of those circumstances you will tell me if you engage in that practice: never, sometimes, often, or always				
		Never	Sometimes	Often	Always
	When washing your face after you get up	1	2	3	4
	When taking a shower or bathing	1	2	3	4
	After going to the toilet	1	2	3	4
	Before eating	1	2	3	4
	Before cooking	1	2	3	4
	Before feeding a child	1	2	3	4

	After work	1	2	3	4
	After touching an animal	1	2	3	4
	After cleaning a child's bottom	1	2	3	4
	After cleaning a toilet	1	2	3	4
	After taking care of a sick person	1	2	3	4
	Other times (indicate which)_____	1	2	3	4
422c.	Now, I am going to read the same list and this time I will ask you to tell me if you ever wash your hands with soap at any of these occasions. Again, I want you to tell me for each one of them how often you engage in the practice: never, sometimes, often, or always. Here we go.				
		Never	Sometimes	Often	Always
	When washing your face after you get up	1	2	3	4
	When taking a shower	1	2	3	4
	After going to the toilet	1	2	3	4
	Before eating	1	2	3	4
	Before cooking	1	2	3	4
	Before feeding a child	1	2	3	4

	After work	1	2	3	4
	After touching an animal	1	2	3	4
	After cleaning a child's bottom	1	2	3	4
	After cleaning a toilet	1	2	3	4
	After taking care of a sick person	1	2	3	4
	Other times (indicate which)_____	1	2	3	4

423	**(OBSERVE AND ASK TO SEE)** Can you show me where you usually wash your hands?	Inside/near toilet facility…… 1 Inside/near kitchen/cooking space…….. 2 Elsewhere in yard…….. 3 Outside yard…….. 4 No specific place…… 5 No permission to see…….. 6	
424	**(OBSERVE)** Location: What is the hand washing device?	Faucet..... …… 1 Tippy tap .....…… 2 Basin/bucket ... …….. 3 Other (specify)_____ 4	
425	**(OBSERVE)** Was water available at time of interview?	NO ..... …… 1 YES..... …….. 2	
426	**(ASK)** Did you have water here yesterday?	NO ..... …… 1 YES..... …….. 2	

427	**(OBSERVE ONLY)** Is there soap or detergent or other locally used cleansing agent? This item should be either in place or brought by the interviewee within 5 minutes. If the item Is not present within that time, check none, even if provided later.	None..... ……. 1 Soap ..... …….. 2 Detergent ... ……..... 3 Ash ..... ……. 4 Mud …….. 5 Sand…….. 6 Other (specify)_____ 7	
428	Who in the family keeps water available at this hand washing station?	Wife…….. 1 Daughter…… 2 Husband…….. 3 Son……. 4 Somebody else (specify)_____ 5	

(429-431) - When/How Hands Are Washed

429	**(RECORD ALL MENTIONED)** Sometimes people wash their hands before or after doing certain activities. What do you think are the most important occasions?	After defecation ……. 1 Before eating . ……. 2 After cleaning a child/washing a diaper…… 3 After cleaning the latrine…….. 4 After cleaning a potty…… 5 Before food preparation…….. 6 Before feeding a child…….. 7 After eating .. …… 8 After cleaning the house…… 9 Other (specify)_____ 10	
430	What are the reasons for washing hands?	Prevent diarrhea…….. 1 Prevent other diseases…….. 2 Remove germs …….. 3 Prevent dirt getting into mouth…….. 4 Prevent dirt from getting into food…… 5 Smells good .. …….. 6 Other (specify)_____	
431	What are the reasons for washing hands with soap/ash?	Prevent diarrhea…….. 1 Prevent other diseases…….. 2 Remove germs …….. 3 Prevent dirt getting into mouth…… 4 Prevent dirt from getting into food…… 5 Smells good .. …….. 6 Other (specify)_____ 7	

(501-521) - Management of Human Feces

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Do you have any children under three years of age?	No…….. 1 Yes…….. 2	
502	The last time the youngest child passed a stool, where did he/she defecate?	Used sanitation facility…….. 1 Used potty..... …….. 2 Used washable diapers …….. 3 Used disposable diapers…… 4 I held him/her (over some leaves/scrap)…….. 5 Went in house/yard .. …… 6 Went outside the premises…… 7 Went in his/her clothes …….. 8 Don't know..... …… 9 Other (specify)_____ 10	
503	What happened to the feces? Left there, or disposed of?	Left where child defecated…… 1 Disposed of …….. 2	→505
504	The last time your youngest child under your care defecated, where did you dispose of the feces?	Dropped into toilet facility …… 1 Buried..... …… 2 Solid waste/trash ..... 3 In yard ..... 4 Outside premises ... …….. 5 Public latrine…….. 6 Into sink or tub..... 7 Thrown into waterway…… 8 Thrown elsewhere (specify)_____ 9	

505	Where do members of your household usually go to defecate?	None, field bush, plastic bag……. 1 Flush or pour flush toilet flushed to: Piped sewer system…….. 2 Septic tank…… 3 Soak pit latrine…….. 4 Somewhere else…… 5 Ventilated improved pit latrine…….. 6 Pit latrine with slab…….. 7 Pit latrine without slab/open pit……. 8 Composting toilet…….. 9 Bucket toilet…….. 10 Hanging toilet/latrine…….. 11 Other (specify)_____ 12	→517
506	Who in the family decided to install the latrine?	Wife…….. 1 Daughter…… 2 Husband……. 3 Son…….. 4 Somebody else (specify)_____ 5	
507	Who physically installed the latrine?	Husband …… 1 Mason…… 2 Whole family…… 3 Health extension worker…….. 4 Community…… 5 Other (specify)_____ 6	
507a	Did you consult with anyone to determine where to construct the latrine?	No…….. 1 Yes……. 2	→ 508

507b	Who did you consult?	Health extension workers…….. 1 Mason…… 2 Neighbor…… 3 Husband……. 4 Other (specify)_____ 5	
508	Who decided the site for the latrine?	Wife…….. 1 Daughter…… 2 Husband……. 3 Son…….. 4 Somebody else (specify)_____ 5	
509	Where is your latrine?	Inside/attached to dwelling…… 1 Elsewhere on premises ……. 2 Outside premises ... …….. 3 Public latrine…….. 4	
511	How long have you had that larine? *(Write information in months)*	☐☐	
511a	Who in the household uses the latrine?	All family members…….. 1 Only adult males in family…… 2 Only adult females in family……. 3 Only visitors…….. 4 Other (specify)_____ 5	
512	Do you share this facility with other households?	NO……. 1 YES…….. 2	
513	How many households share this facility? *(Write number of households)*	Number of households ☐☐	

514	What were the top three reasons for building the facility? *(Multiple choice, do not read answers, record all answers provided)*	Status/pride …….. 1 Comfort…….. 2 Convenience…….. 3 Privacy…….. 4 Avoid sharing with others…….. 5 Security…….. 6 Disease prevention…… 7 Shame of environmental contamination …….. 8 Other (specify)_____ 9	
515	Did you do any recent maintenance work or improvements on this latrine?	NO…….. 1 YES…….. 2	
516	What did you do?	Changed an element of the structure above the ground…….. 1 Changed to a new pit…….. 2 Emptied the pit …… 3 Improved the walls…… 4 Added a cover for the pit…….. 5 Other (specify)_____ 6	
517	What are the top three reasons for not currently having a latrine in your house? *(Multiple choice, do not read answers, record all answers provided)*	Not having adequate plot of land/no land to construct the toilet …….. 1 Soil is loose …….. 2 Did not have adequate construction materials …… 3 Not anyone to construct it…….. 4 Construction cost is expensive …….. 5 Not knowing how to construct latrine …….. 6 Not being able to get permssion from local authorities to construct the toilet …… 7 We have other priorites …… 8 Other (specify)_____ 9	

518	How satisfied are you with the place where your family defecates? *(Read answers)*	Very unsatisfied…….. 1 Somewhat unsatisfied…… 2 No opinion…… 3 Somewhat satisfied…….. 4 Very satisfied…… 5 Other (specify)_____ 6	
519	How likely is it that you'll make any changes to your current sanitation situation?	Very unlikely…….. 1 Somewhat unlikely…… 2 No opinion…… 3 Somewhat likely…… 4 Very likely…… 5	
520	What would you like to do to change your current sanitation situation?	Build a private latrine…… 1 Improve the current private latrine family has……. 2 Help build a community latrine……. 3 Request government/outside assistance for improving situation…….. 4 Nothing, satisfied…….. 5 Other (specify)_____ 6 Do not know…….. 7	
521	Do you intend to install/change a sanitation facility in the next six months?	NO…… 1 YES…….. 2	

(522-543) - Sanitation Observations and Gender Roles

522	Can I see the sanitation facility?	Not allowed…….. 1 Allowed to see it .... …….. 2	
523	**(OBSERVE)** Distance of the facility from the house?	Within house ……. 1 In yard…… 2 1-20 meters from house……. 3 21+ meters from house ……. 4	

524	**(OBSERVE)** Does it have walls?	NO .... 1 YES..... 2	
525	**(OBSERVE)** Can outside observers see through the walls?	NO .... 1 YES..... 2	
526	**(OBSERVE)** Does it have a roof?	NO .... 1 YES..... 2	
527	**(OBSERVE)** Is roof in good condition to provide shelter from the elements?	NO .... 1 YES..... 2	
528	**(OBSERVE)** At the latrine entrance, is there a door, curtain, or other structural way to provide privacy?	NO .... 1 YES..... 2	
529	**(OBSERVE)** Does it have any of these child-friendly features:	Pit latrine with smaller hole..... 1 Lower seat..... ..... 2 Cannot determine . ..... 3 None of the above 4	
530	**(OBSERVE)** Is the pit covered?	NO .... 1 YES..... 2	
531	**(OBSERVE)** Is the latrine being used? If there are feces in the pit, throw a rock and listen if it seems wet, if there is evidence of anal cleansing, and/or if the path to the latrine seems to have been walked on. Check all that apply.	Detected feces in pit using a flashlight..... 1 Observed anal cleansing materials in latrine..... 2 Detectable path to the latrine..... 3 Slab is wet..... 4 Slab is grey color..... 5 Smelly..... 6 Flies around it..... 7	

532	**(Cleaning and operation—*for dry latrines only*.** *Observe conditions, first circling characteristics and subsequently reporting corresponding points in score column of table provided below. Add points to arrive at total score*.)			
Latrine Component	**No Cleaning/ Operation** **(Score of 0)**	**Limited Cleaning/Operation** **(Score of 1)**	**Adequate Cleaning/Operation (Score of 2)**	**Scores**

Floor (concrete, soil, plastic, tile, wood, etc.)	Abundant fecal matter/used anal cleansing material on floor to the extent that entering facility without stepping on feces is difficult. Dried fecal matter is present.	Limited amount of fecal matter or used anal cleansing material on floor. Smeared feces may be present.	No fecal matter or used anal cleansing material on floor.	
Hole Cover/Lid *(if clearly part of original facility)*	No hole cover present.	Hole cover defective, broken, or not used.	Hole cover placed over hole and tight fitting.	
Anal Cleansing Material	Soiled anal cleansing material accumulated on floor of latrine.	Some soiled anal cleansing material on latrine floor.	No soiled anal cleansing material visible.	

537	**(OBSERVE)** Is there a hand washing station inside or near the latrine (not more than 10 paces away from the latrine)?	NO ..... 1 YES..... 2	→ 541
538	**(OBSERVE)** Is there water at that hand washing station inside or near the latrine?	NO ..... 1 YES..... 2	→ 540
539	**(OBSERVE)** What container is used for water at the HW station?	Tap ..... 1 Tippy tap ... 2 Bucket ..... 3 Other (specify)_____ 4	
540	**(OBSERVE)** Is there a cleansing agent at this hand washing station inside/near the latrine? *(Record all present)*	None..... 0 Soap ..... 1 Detergent .. 2 Ash ..... 3 Other (specify)_____ 4	
541	**(ASK)** Who cleans the latrine?	Wife..... 1 Daughter..... 2 Husband..... 3 Son..... 4 Somebody else (specify)_____ 5	

542	**(ASK)** Who brings the water to the hand washing station here?	No such family…… 1 Wife…….. 2 Daughter…….. 3 Husband…… 4 Son…… 5 Somebody else (specify)_____ 6	
543	**(ASK)** Who makes sure there is a cleansing agent available?	No such agent…….. 1 Wife…….. 2 Daughter…….. 3 Husband…… 4 Son…… 5 Somebody else (specify)_____ 6	

(600) - Psychosocial Determinants of Latrine Ownership

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
Now, I am going to ask a series of questions to get a sense of your opinions. I would appreciate it if you answered by telling me if you agree, if you disagree, or if you have no opinion on the matter. However, if you agree or disagree, I would like you to let me know if you totally or partially agree or if you totally disagree or you are indifferent. What about if I say to you:			
OK. Let's get started. Tell me your opinion about the following statements. Having a latrine:			
600	Makes owners modern	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	

601	Makes owners respected members of their communities	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
602	Makes owners respected by visitors that come to their house	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
603	Makes owners popular	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
604	Makes family members proud	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
605	Allows women to have privacy any time of the day	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
606	Helps keep the family compound clean	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
607	Allows you to defecate easily when you are old	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	

608	Reduces the possibility of disease in your family	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
609	Gives latrine users more privacy	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
610	It is a nuisance to go to the latrine all the time to defecate.	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
611	Avoids the dangers of defecating in the bush at night	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
612	My family contributes to our community's pride by having a latrine in our house.	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
613	My family contributes to our community's health by having a latrine in our house.	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	
614	My family contributes to our community's development by having a latrine in our house	Totally agree…… 4 Partially agree…….. 3 Indifferent…… 2 Totally disagree…… 1	

(700-713) - Exposure Information

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Since Christmas, have you been told, heard, or seen any information about hand washing?	NO . …….. 1 YES... …….. 2	
702	What was the source of that information? Anywhere else? *(Record all mentioned)*	Through health center……. 1 Through outreach extension worker (health extension worker, NGO outreach worker, or community health volunteer)…….. 2 Through children that go to school…….. 3 Through the radio……. 4 Through leader farmers…… 5 Through other channels (specify)_____ 6	
703	What did you hear or learn about hand washing? Anywhere else? *(Record all mentioned)*	It is important to wash hands with soap…….. 1 When to wash hands with soap…… 2 How to wash with soap…….. 3 How to make a tippy tap…….. 4 Where to put the hand washing station…… 5 Other (specify)_____ 6	
704	Since Christmas, have you seen or been told about the tippy tap devise for making hand washing easier?	NO . …….. 1 YES... …….. 2	
705	Have you ever been visited by a health extension worker or a community health volunteer?	NO . …….. 1 YES... …….. 2	
706	When were you last visited by the HEW or community health volunteer?	(Convert information to weeks. If in the present week write 0).	
707	Since Christmas, have you been told, heard, or seen any information about treating the water you drink?	NO . …….. 1 YES..…….. 2	

	Where did you hear or see it?	Through health center……. 1 Through outreach extension worker (health extension worker, NGO outreach worker, or community health volunteer)……. 2 Through children that go to school…….. 3 Through the radio……. 4 Through leader farmers…… 5 Through other channels (specify)_____ 6	
	What have you heard or seen? (Unprompted)	Use Wuha Agar…….. 1 Boil water until the bubbles can be seen…….. 2 Other (specify)_____ 3	
	Have you been told to cover your drinking containers?	NO . …….. 1 YES..…….. 2	
704	Where did you see or hear about covering your drinking water containers? Anywhere else? *(Record all mentioned)*	Through health center…….. 1 Through outreach extension worker (health extension worker, NGO outreach worker, or community health volunteer)…….. 2 Through children that go to school…….. 3 Through the radio……. 4 Through leader farmers…… 5 Through other channels (specify)_____ 6	
705	Since Christmas, have you heard or seen anything about sanitation and latrines?	NO . …….. 1 YES..…….. 2	
706	What was the source of the information? Anywhere else? *(Record all mentioned)*	Through health center…….. 1 Through outreach extension worker (health extension worker, NGO outreach worker, or community health volunteer)……. 2 Through children that go to school…….. 3 Through the radio……. 4 Through leader farmers…… 5 Through other channels (specify)_____ 6	

707	What did you see or hear? *(Record all mentioned)*	Stop open defecation…… 1 Do not contaminate the rivers and lake with human feces... 2 Install a latrine in your household…… 3 Open defecation may cause disease…… 4 Other (specify)_____ 5	
709	Did your village participate in the shame walk activity?	NO . …….. 1 YES…….. 2	
710	Have you ever been visited by an outreach extension worker or others to stop open defecation?	NO . …….. 1 YES…….. 2	
711	Have you ever been visited by a village health educator to improve your toilet?	NO . …….. 1 YES…….. 2	
711a	Has this educator discussed with you what type of toilet would be appropriate for your family needs and possibilities?	NO . …….. 1 YES…….. 2	
712	In the past month, have you received information about diarrhea?	NO . …….. 1 YES…….. 2	
713	What was the source of that information? Anywhere else? *(Record all mentioned)*	Through health center…….. 1 Through outreach extension worker (health extension worker, NGO outreach worker, or community health volunteer)…….. 2 Through children that go to school…….. 3 Through the radio…… 4 Through leader farmers…… 5 Through other channels (specify)_____ 6	

Hygiene, Water and Sanitation

Generic School Survey Questionnaire

Consent Form:

The regional government would like to improve the living conditions of residents in your community. To be able to do this, however, we need your help to learn about the hygiene and sanitation condition in the school environment. We would like to talk with a responsible person in your school. The information we collect during this interview will be entirely confidential and we will not ask for the names of anyone interviewed. Also, when the results of all of the interviews are combined, we will not associate specific individuals/schools with any of the information collected. The information you provide will help government offices develop better programs to address the water and sanitation issues faced by the school community.

(Please circle the category that describes the decision made by the respondent.)

Consent granted_____

Consent refused_____

The informant here is the principal of the school.

	Section 1: Identification of Area of Observation	
1	Name of the school	_____
2	Zone	_____
3	Woreda	_____
4	Kebele	_____
5	Name of the interviewer	_____
6	Name of the supervisor	_____
7	Visit date	_____
8	How many students are registered in the school this academic year?	_____
9	How many of the students are female?	_____
10	How many of the students are male?	_____
11	How many administrative and teaching staff work in the school this academic year?	_____
12	How many of administrative and teaching employees are male?	_____

13	How many administrative and teaching employees are female?	_____	

Section 2: Sanitation				
14	Does this school have latrines accessible to children?	NO……..	0	→73 (skip)
		YES……..	1	
15	Is this latrine used by both boys and girls?	NO……..	0	→34
		YES……..	1	
16	Can I see please?	NO……..	0	→ 34
		YES……..	1	
17	**(OBSERVE)** How many squat holes does the latrine have? *(Write the number directly in space)*	_____	0 1	If only one squat hole →20
18	**(OBSERVE)** Are there walls that separate the squat holes allowing for privacy?	NO……..	0	
		YES……..	1	
19	**(OBSERVE)** Do (all) squat hole(s) have a slab?	NO……..	0	
		YES……..	1	
20	**(OBSERVE)** Does the latrine have a secured entry?	NO……..	0	
		YES……..	1	
21	**(OBSERVE)** Does the latrine have a roof?	NO……..	0	
		YES……..	1	
22	**(OBSERVE)** Is the slab broken?	NO……..	0	
		YES……..	1	
23	**(OBSERVE)** Is the squat hole too big to the point that students can sink in?	NO……..	0	
		YES……..	1	
24	**(OBSERVE)** Is the latrine superstructure collapsing?	NO……..	0	
		YES……..	1	
25	**(OBSERVE)** Is the latrine dilapidated?	NO……..	0	

		YES…….. 1	
26	**(CONCLUDE)** Using responses to questions 24 through 27, does the latrine look functional?	NO…….. 0 YES…….. 1	
27	**(OBSERVE)** Is it locked on the outside needing a key to get in?	NO…….. 0 YES…….. 1	
28	**(OBSERVE)** Is it clean? (For example, human excrement not on slab, anal cleansing materials not dispersed around slab)	NO…….. 0 YES…….. 1	
29	**(OBSERVE)** Is there a hand washing station near the latrine?	NO…….. 0 YES…….. 1	→34
30	Is this a "yoke" hand washing station where different tippy taps are connected to each other to permit multiple students to wash their hands at the same time?	NO…….. 0 YES…….. 1	
31	**(OBSERVE)** Is there water in the hand washing station at any of the tippy taps (if yoke style?)	NO…….. 0 YES…….. 1	
32	**(OBSERVE)** Is there soap at the hand washing station?	NO…….. 0 YES…….. 1	
33	Is there ash at the hand washing station?	NO…….. 0 YES…….. 1	
34	Is there a latrine exclusively for girls?	NO…….. 0 YES…….. 1	→ 53
35	Can I see please?	NO…….. 0 YES…….. 1	→53
36	**(OBSERVE)** How many squat holes does the latrine have?	_____	If only one squat hole → 39

37	**(OBSERVE)** Are there walls that separate the squat holes allowing for privacy?	NO…….. 0 YES…….. 1	
38	**(OBSERVE)** Do (all) squat hole(s) have a slab?	NO…….. 0 YES…….. 1	
39	**(OBSERVE)** Does the latrine have a secured entry?	NO…….. 0 YES…….. 1	
40	**(OBSERVE)** Does the latrine have a roof?	NO…….. 0 YES…….. 1	
41	**(OBSERVE)** Is the slab broken?	NO…….. 0 YES…….. 1	
42	**(OBSERVE)** Is the squat hole too big to the point that students can sink in?	NO…….. 0 YES…….. 1	
43	**(OBSERVE)** Is the latrine superstructure collapsing?	NO…….. 0 YES…….. 1	
44	**(OBSERVE)** Is the latrine dilapidated?	NO…….. 0 YES…….. 1	
45	**(CONCLUDE)** Using responses to questions 41 through 44, does the latrine look functional?	NO…….. 0 YES…….. 1	
46	**(OBSERVE)** Is it locked on the outside needing a key to get in?	NO…….. 0 YES…….. 1	
47	**(OBSERVE)** Is it clean? (For example, human excrement not on slab, anal cleansing materials not dispersed around slab)	NO…….. 0 YES…….. 1	
48	**(OBSERVE)** Is there a hand washing station near the latrine?	NO…….. 0 YES…….. 1	→53
49	Is this a “yoke” hand washing station where different tippy taps are connected to each other to permit multiple students to wash their hands	NO…….. 0 YES…….. 1	

	at the same time?		
50	**(OBSERVE)** is there water in the hand washing station at any of the tippy taps (if yoke style?)	NO…….. 0 YES…….. 1	
51	**(OBSERVE)** Is there soap at the hand washing station?	NO…….. 0 YES…….. 1	
52	Is there ash at the hand washing station?	NO…….. 0 YES…….. 1	
53	Are there latrines exclusively for boys?	NO…….. 0 YES…….. 1	→93
54	Can I see it please?	NO…….. 0 YES…….. 1	→ 93
55	**(OBSERVE)** How many squat holes does the latrine have? *(Write down number in space provided)*	_____	If only one squat hole →57
56	**(OBSERVE)** Are there walls that separate the squat holes allowing for privacy?	NO…….. 0 YES…….. 1	
57	**(OBSERVE)** Do (all) squat hole(s) have a slab?	NO…….. 0 YES…….. 1	
58	**(OBSERVE)** Does the latrine have a secured entry?	NO…….. 0 YES…….. 1	
59	**(OBSERVE)** Does the latrine have a roof?	NO…….. 0 YES…….. 1	
60	**(OBSERVE)** Is the slab broken?	NO…….. 0 YES…….. 1	
61	**(OBSERVE)** Is squat hole too big to the point that students can sink in?	NO…….. 0 YES…….. 1	
62	**(OBSERVE)** Is the latrine superstructure collapsing?	NO…….. 0 YES…….. 1	
63	**(OBSERVE)** Is the latrine dilapidated?	NO…….. 0	

		YES…… 1	
64	**(CONCLUDE)** Using responses to questions 60 through 63, does the latrine look functional?	NO…… 0 YES…… 1	
65	**(OBSERVE)** Is it locked on the outside needing a key to get in?	NO…… 0 YES…… 1	
66	**(OBSERVE)** Is it clean? (For example, human excrement not on slab, anal cleansing materials not dispersed around slab)	NO…… 0 YES…… 1	
67	**(OBSERVE)** Are there urinals for boys?	NO…… 0 YES…… 1	
68	**(OBSERVE)** Is there a hand washing station near the latrine/urinal?	NO…… 0 YES…… 1	
69	Is this a "yoke" hand washing station where different tippy taps are connected to each other to permit multiple students to wash their hands at the same time?	NO…… 0 YES…… 1	
70	**(OBSERVE)** Is there water in the hand washing station at any one of the tippy taps (if yoke style?)	NO…… 0 YES…… 1	
71	**(OBSERVE)** Is there soap at the hand washing station?	NO…… 0 YES…… 1	
72	Is there ash at the hand washing station?	NO…… 0 YES…… 1	
73	Does this school have latrines for administrative and teaching staff?	NO…… 0 YES…… 1	
74	Do both men and women in the staff use the same latrine?	Males only…… 1 Females only…… 2 Both sexes…… 3	→92 →111
75	Can I see it please?	NO…… 0 YES…… 1	

76	**(OBSERVE)** How many squat holes does the latrine have?	_____	
78	**(OBSERVE)** Does the latrine have a slab?	NO…….. 0 YES…….. 1	
79	**(OBSERVE)** Does the latrine have a secured entry?	NO…….. 0 YES…….. 1	
80	**(OBSERVE)** Does the latrine have a roof?	NO…….. 0 YES…….. 1	
81	**(OBSERVE)** Is the slab broken?	NO…….. 0 YES…….. 1	
82	**(OBSERVE)** Is the squat hole too big to the point that anyone can sink in?	NO…….. 0 YES…….. 1	
83	**(OBSERVE)** Is the latrine superstructure collapsing?	NO…….. 0 YES…….. 1	
84	**(OBSERVE)** Is the latrine dilapidated?	NO…….. 0 YES…….. 1	
85	**(CONCLUDE)** Using responses to questions 81 through 84, does the latrine look functional?	NO…….. 0 YES…….. 1	
86	**(OBSERVE)** Is it locked?	NO…….. 0 YES…….. 1	
87	**(OBSERVE)** Is it clean? (Check for indications that the latrine is clean)	NO…….. 0 YES…….. 1	
88	**(OBSERVE)** Is there a hand washing station near the latrine?	NO…….. 0 YES…….. 1	
89	**(OBSERVE)** Is there water in the hand washing facility?	NO…….. 0 YES…….. 1	
90	**(OBSERVE)** Is there soap at the hand washing station?	NO…….. 0 YES…….. 1	

91	**(OBSERVE) I**s there ash at the hand washing station?	NO…….. 0 YES…….. 1	
92	Are there latrines exclusively for males in the administrative and teaching staff?	NO…….. 0 YES…….. 1	→111
93	Can I see it please?	NO…….. 0 YES…….. 1	→111
94	**(OBSERVE)** How many squat holes does the latrine have?	_____	
96	**(OBSERVE)** Does the latrine have a slab?	NO…….. 0 YES…….. 1	
97	**(OBSERVE)** Does the latrine have a secured entry?	NO…….. 0 YES…….. 1	
98	**(OBSERVE)** Does the latrine have a roof?	NO…….. 0 YES…….. 1	
99	**(OBSERVE)** Is the slab broken?	NO…….. 0 YES…….. 1	
100	**(OBSERVE)** Is the squat hole too big to the point that anyone can sink in?	NO…….. 0 YES…….. 1	
101	**(OBSERVE)** Is the latrine superstructure collapsing?	NO…….. 0 YES…….. 1	
102	**(OBSERVE)** Is the latrine dilapidated?	NO…….. 0 YES…….. 1	
103	**(CONCLUDE)** Based on responses to questions 99 thru 102, is it functional?	NO…….. 0 YES…….. 1	
104	**(OBSERVE)** Is it locked?	NO…….. 0 YES…….. 1	
105	**(OBSERVE)** Is it clean? *(Check for indications that the latrine is clean)*	NO…….. 0 YES…….. 1	

106	**(OBSERVE)** Are there urinals for male administrative and teaching staff?	NO…….. 0 YES…….. 1	
107	**(OBSERVE)** Is there a hand washing station near the latrine/urinal?	NO…….. 0 YES…….. 1	
108	**(OBSERVE)** Is there water in the hand washing facility?	NO…….. 0 YES…….. 1	
109	**(OBSERVE)** Is there soap at the hand washing station?	NO…….. 0 YES…….. 1	
110	Is there ash at the hand washing station?	NO…….. 0 YES…….. 1	
111	Are there latrines exclusively for female administrative and teaching staff?	NO…….. 0 YES…….. 1	→130
112	Can I see it please?	NO…….. 0 YES…….. 1	→130
113	**(OBSERVE)** How many squat holes does the latrine have?	_____	
114	**(OBSERVE)** Does the latrine have a slab?	NO…….. 0 YES…….. 1	
115	**(OBSERVE)** Does the latrine have a secured entry?	NO…….. 0 YES…….. 1	
116	**(OBSERVE)** Does the latrine have a roof?	NO…….. 0 YES…….. 1	
117	**(OBSERVE)** Is the slab broken?	NO…….. 0 YES…….. 1	
118	**(OBSERVE)** Is the squat hole too big to the point that anyone can sink in?	NO…….. 0 YES…….. 1	
119	**(OBSERVE)** Is the latrine superstructure collapsing?	NO…….. 0 YES…….. 1	

120	**(OBSERVE)** Is the latrine dilapidated?	NO…….. 0 YES…….. 1	
121	**(CONCLUDE)** Based on responses to questions 117 thru 120, is it functional?	NO…….. 0 YES…….. 1	
122	**(OBSERVE)** Is it locked?	NO…….. 0 YES…….. 1	
124	**(OBSERVE)** Is it clean? *(Check for indications that the latrine is clean)*	NO…….. 0 YES…….. 1	
125	**(OBSERVE)** Are there urinals for male administrative and teaching staff?	NO…….. 0 YES…….. 1	
126	**(OBSERVE)** Is there a hand washing station near the latrine/urinal?	NO…….. 0 YES…….. 1	
127	**(OBSERVE)** Is there water in the hand washing facility?	NO…….. 0 YES…….. 1	
128	**(OBSERVE)** Is there soap at the hand washing station?	NO…….. 0 YES…….. 1	
129	Is there ash at the hand washing station?	NO…….. 0 YES…….. 1	

Section 3: Source of Drinking Water for Students			
130	Does the school have water for students?	NO…….. 0 YES…….. 1	→139 (skip)
130a	Is this water used for cleaning?	NO…….. 0 YES…….. 1	
130b	Is this water used for hand washing?	NO…….. 0 YES…….. 1	

130c	Is this water used for drinking?	NO…….. 0 YES……. 1	
131	What is the source of drinking water for the students in the school?	Piped water into yard/plot……. 1 Public tap/standpipe…….. 2 Tube well or borehole…… 3 Protected dug well……. 4 Unprotected dug well…… 5 Water from protected spring……. 6 Water from unprotected spring…… 7 Rainwater…… 8 Tanker truck…….. 9 Cart with small tank…… 10 Surface water…… 11 (River/dam/lake/ponds/stream/canal/ 12 Irrigation channel)…… 13 Other (specify) _____ 14	
132	Is this water treated to make it safe for student consumption?	NO…….. 0 YES……. 1	→135
133	How is it usually treated?	Source bound…….. 1 Surface…… 2 Other method (specify)_____ 3	
134	How does the school get the needed supply of product(s) to treat the water? *(Write all answers provided)*	Budgeted…….. 1 Contributions from the community……. 2 Project specific…… 3 Other sources (specify)_____ 4	
135	What drinking water storage system does the school use? *(Write all answers provided)*	Barrel…… 1 Jerry can…… 2 Sand filter……. 3 Other (specify)_____ 4	

136	**(OBSERVE)** Can I see where you store it please?	Access was given……. 0 Access was not given…….. 1	→139
137	**(OBSERVE)** Are the recipients covered with a hard cover?	None has a hard cover…… 1 Some have hard covers…… 2 Only soft covers like clothing material…… 3 Jerry can, or the like…….. 4	
138	**(OBSERVE)** How do they use it for drinking?	Tap/faucet…… 1 Tool dedicated to only get water…… 2 Other method (specify)_____ 3	

Section 4: Awareness Raising on Hygiene and Sanitation for Students, Family Members, and Communities				
139	Does the school conduct classroom lessons on hygiene targeting students?	NO……..	0	→143 (skip)
		YES……..	1	
140	Are there any curricular materials to support these lessons?	NO……..	0	
		YES……..	1	
141	May I see them?	NO……..	0	
		YES……..	1	
142	**(OBSERVE TITLES AND LOGOS)** Are these materials distributed by the Learning by Doing Initiative?	NO……..	0	
		YES……..	1	
143	During the past 12 months, have health or development agents come to the school to teach students about hygiene?	NO……..	0	
		YES……..	1	
144	Are there hygiene promotion materials such as posters posted on walls or bulletin boards?	NO……..	0	
		YES……..	1	
145	May I see them?	Not shown……	0	
		Shown……..	1	
146	Is there a hygiene club for students at school?	NO……..	0	→150
		YES……..	1	
147	Is this club active?	NO……..	0	
		YES……..	1	
148	Has this club met in the past three months?	NO……..	0	
		YES……..	1	
149	What kinds of activities does the club do?	Build sanitary facilities……	1	
		Maintain sanitary facilities……..	2	
		Put water in hand washing stations…….	3	
	(Multiple responses are possible. Register all indicated. No prompting necessary.)	Clean school grounds……..	4	

		Promote hygiene at school……..	5	
		Promote hygiene outside school…….	6	
		Others (specify)_____	7	
150	Is there a parents association in this school?	NO…….. YES……..	0 1	→153
151	Is this parents association active in WASH?	NO…….. YES……..	0 1	
152	What do they do?	Build sanitary facilities…… Maintain sanitary facilities…….. Put water in hand washing stations…….. Clean school grounds…….. Promote hygiene at school…….. Promote hygiene outside school…….. Others (specify)_____	1 2 3 4 5 6 7	
153	Does the school organize hygiene awareness activities targeting students' parents?	NO…….. YES……	0 1	→156
154	If yes, which ones? *(Multiple answers are possible. Write all that apply.)*	Carnival…….. Information sessions…… Community dialogue…….. Other (specify)_____	1 2 3 4	
155	What topics are addressed by these activities? *(Multiple answers are possible. Write all that apply.)*	Hand washing with soap…….. Treatment of water for house consumption…… Storage of drinking water in the house….. Importance of latrines…… Other (specify)_____	1 2 3 4 5	
156	Does the school carry out hygiene promotion activities targeting the general community?	NO…….. YES……	0 1	→159

157	If yes, what are they? *(Multiple answers are possible. Write all that apply.)*	Fair…….. 1 Information sessions…… 2 Community dialogue…….. 3 Other (specify)_____ 4	
158	What topics are addressed by these activities? *(Multiple answers are possible. Write all that apply.)*	Hand washing with soap…….. 1 Treatment of water for house consumption…… 2 Storage of drinking water in the house….. 3 Importance of latrines …… 4 Other (specify)_____ 5	
159	Does the school have any teachers trained in hygiene promotion?	NO…….. 0 YES…… 1	→End questionnaire here
160	Were they trained by the Hygiene Improvement Project or its partners?	NO…….. 0 YES…… 1	

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