



Amhara National Regional State Health Bureau

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

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Table of Contents

Acknowledgements	i
Table of Contents	ii
Introduction	1
Components of the Conceptual Framework	1
Data Collection at the Household Level	4
Detailed Description of Indicators	9
# national, regional or district level policies, strategies, programs and projects advanced through WSP/HIP involvement or leadership (1)	9
# of relevant job positions modified/created to support partnership and at-scale activities (2)	10
# of woredas developing integrated annual plans developed with contributions from all relevant partners (3)	11
Amount of funds leveraged from donors/NGOs to support hygiene and sanitation at scale in Amhara Region (4)	12
# of institutional partners showing increasing collaboration by new and strengthened linkages with other organizations (5)	13
# of strategies/guidelines developed, distributed and used 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)	15
% of trainees mastering knowledge/skills per newly developed guidelines by institutional affiliation and topic of training (7)	16
% of trained teachers using newly introduced hygiene materials (8)	17
% of trained household visitors/health promoters in targeted woredas/kebeles applying BC and M&E tools introduced via WSP/HIP training activities (9)	18
% of annual budget spent by targeted woredas (10)	19
% of targeted woredas that implemented WSRs (11)	20
% of targeted woredas with joint WASH plans stimulated by WSRs (12)	21
# of targeted woredas implementing collaborative actions between implementing partners (13)	22
% of targeted woredas implementing integrated hygiene promotion actions to complement hardware investments (14)	23
% of households using improved sanitation facilities meeting minimum standards by woreda (15)	25
% of hw stations near improved sanitation facilities meeting minimum standards with appropriate hw supplies by woreda (16)	26

% of caretakers of children under five washing hands with cleansing agent during at least two of the critical junctures (17)	28
% of households with improved latrines practicing required infra and super structure maintenance by woreda (18)	30
% of households targeted practicing effective household water treatment by woreda (19)	32
% of targeted households practicing effective drinking water storage by woreda (20)	34
% of woredas/kebeles receiving award(s) for completion of sanitation/hygiene targets (21)	35
% of water user committees with women as treasurers (22)	36
% of students with increased knowledge of promoted hygiene practices by woreda (23)	37
% of targeted schools complying with child/latrine ratio defined by the national Protocol for Hygiene and Sanitation by sample strata (24)	38
% of targeted schools with water supply (25)	39
% of targeted schools with hw stations that have running water and cleansing agent (26)	40

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: 1) a discussion on sampling issues for a household study that needs to be conducted to assess behavioral outcomes, and 2) a fuller description of the different indicators that are being proposed.

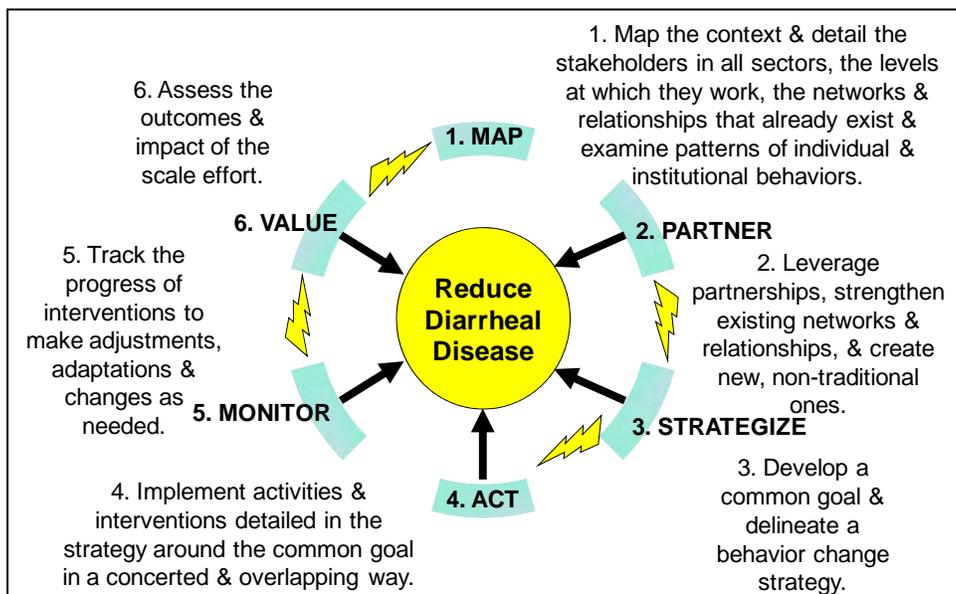
Components of the Conceptual Framework

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 chart presented below to summarize 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: 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. After the chart, a detailed description of the indicators is presented.

Detailed Description of Indicators

national, regional or district level policies, strategies, programs and projects advanced through WSP/HIP involvement or leadership (1)

Rationale/Critical Assumptions for Indicator: Continued collaboration between WSP and HIP in the Learning by Doing Initiative in the Amhara Region Legal basis for at-scale operations must be in place

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 1, IR Partnerships to facilitate coordinated action at regional and district levels fostered				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual		2	10	10
<p>Indicator Description (Definition)/calculation: Policies and strategies include documents that help guide decisions, make priorities and guide implementation activities to achieve hygiene at-scale outcomes. The strategies may be translated into specific programs and projects. Any of these documents may have been drafted at the national, regional or woreda level in Ethiopia. As a result, they could be ministerial documents, documents generated by different pertinent departments in the Amhara Region such as the Health, the Water Resources or the Education Departments. They also include documents generated at the woreda level that serve the same purpose. These would be documents in which the WSP/HIP collaboration has been instrumental in getting them drafted, discussion and/or published. At-scale refers to any contribution to increase institutional coordination that can facilitate geographic access or coverage to both the hardware and software aspects of hygiene improvement framework. Examples include Memoranda of Understanding between ministries, ministerial decrees, and woreda ordinances.</p>				
<p>Data Source: Actual policy, strategy, program or project documents with evidence of approval or submission for approval. Content analysis should include area of jurisdiction of document and topic addressed (water, sanitation). Documents obtained on an annual basis from all participating government levels.</p>				
<p>Data Analysis: Simple count with content analysis to determine contribution to at-scale objectives, jurisdiction, and topic.</p>				
<p>Issues/Limitations: Assessment of the quality and comprehensiveness of the documents.</p>				

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

Rationale/Critical Assumptions for Indicator: Continued collaboration between WSP and HIP in the Learning by Doing Initiative in the Amhara Region. The administrative infrastructure to facilitate the implementation of the policies, strategies, programs and projects must be in place. Job descriptions and performance indicators needs to change to reflect new responsibilities of staff associated with the enforcement/implementation of policies, strategies, programs and projects.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 2, IR Partnerships to facilitate coordinated action at regional and district levels fostered				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual				
Indicator Description (Definition)/calculation: Job positions may be modified or created in support of the partnership generated with WSP/HIP leadership. The job positions would be in the organizations that are part of the partnership. To keep costs down, the organizations may modify responsibilities of existing staff to include assignments related to the hygiene and sanitation field; organizations may also create new positions with responsibilities previously absent from their structures; and may reward staff differently for the performance to take into account either added or new responsibilities. The staff changes and the changes in job descriptions or in performance assessments that occur are likely to happen at the regional, at the zonal and the woreda level. Tracking structural changes in organizations will determine which new positions have been created. The focus of this indicator is one the positions as opposed to the number of individuals serving in them. For example, changes may be introduced into the job description of HEWs to reflect the new hygiene promotion activities such as the use of negotiation tools to facilitate the adoption of hygiene practices. So, what it is tracked in the number of positions modified not the number of HEWs being judged using a different set of performance criteria.				
Data Source: Organizational structures, budgets, and job descriptions for existing or newly created positions at regional and woreda levels.				
Data Analysis: Simple count with content analysis to determine modifications or additions.				
Issues/Limitations: Focus on the administrative infrastructure without exploring the performance of that administration.				

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

Rationale/Critical Assumptions for Indicator.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 3, IR Partnerships to facilitate coordinated action at regional and district levels fostered				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual		11	11+	11+
<p>Indicator Description (Definition)/calculation: Prior to the initiation of the Learning by Doing Initiative, government partners involved in the newly formed partnership produced separate annual work plans. The steering committee of the Initiative must see to it that annual work plans reflect the different activities implemented by all partners involved in order to facilitate coordinated efforts among them. If participating institutions continue to generate individual work plans given their mandates and management structures, the work plans of individual organizations should reflect the collaboration efforts that are planned with other partnership members. For example, an activity previously separated between the Water Bureau and the Health Bureau about the promotion of water user committees, may now appear in the respective plans of the mentioned institutions with an indication that this is a collaborative effort to mutually support the water sector. The annual work plans that are expected to show the collaboration efforts should be generated at the regional level. However, individual woredas should also follow the same rationale. A partner is an organization from the public or private sector, which participated in the WSR exercise and has continuously expressed interest in supporting the initiative and has made commitments to support the implementation of the Learning by Doing Initiative in woredas where they operate, to integrate promotional materials, or to commit resources to the initiative.</p>				
<p>Data Source: Work plans generated by partners or the steering committee of the Learning by Doing Initiative; minutes of planning meetings; memos addressed by partners to the Steering Committee to express collaboration proposals/intentions. In depth interviews with Steering Committee members and partner organizations may also take place.</p>				
<p>Data Analysis: Content analysis of the plans, minutes of planning meetings or expressions of collaborations recorded. Content analysis of in-depth interviews with Steering Committee members and representatives of partner organizations.</p>				
<p>Issues/Limitations: The work plan as it is updated annually should be an indication that the partnership is working, that agreements are being made, and that work is being accomplished. Other supporting indicators could address the expansion and replication of the partnership by measuring:</p> <ul style="list-style-type: none"> • The increase in the number of partners • The number of new communities • The amount of increased funding. 				

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

Rationale/Critical Assumptions for Indicator. Apart from the legal structure that is needed for partnerships to develop and foster under the Learning by Doing Initiative, resources that are made available for the implementation of activities by the different stakeholders in the partnership will make the partnership more viable and increasing coverage, facilitate hygiene practices uptake and reaching scale more likely.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 4, IR Partnerships to facilitate coordinated action at regional and district levels fostered				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual				
<p>Indicator Description (Definition)/calculation: US dollar amount in non-WSP/HIP US dollars leveraged in-kind or in cash from other donors and partners. Donors may include bilateral or multilateral agencies as well as foundations. Partners may be NGOs and entities practicing corporate social responsibility. As activities expand at the woreda level, partners may decide to use their own funds to complement the efforts undertaken by government agencies. For example, UNICEF, the African Development Bank, FINNIDA through Finnconsult, ESHE and members of the Millennium Water Alliance are all working in sections of Ethiopia and are willing to devote part of their resources to support the Learning by Doing Initiative in different capacities. The contributions of these different partners to implement different aspects of the Learning by Doing Initiative need to be captured in order to establish the magnitude of their contributions.</p>				
<p>Data Source: MOUs between partners, financial records of participating organizations. Estimates of in-kind contributions may be needed.</p>				
<p>Data Analysis: Conversion of financial contributions to US dollars as expressed in agreements, available documents. Adding contributions and adding them by partner over time.</p>				
<p>Issues/Limitations: Partners must accept to provide financial records.</p>				

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

Rationale/Critical Assumptions for Indicator. HIP uses a systems-approach to reach scale. This approach requires examining a “problem” in its entirety – components and implications. It requires that problem-solving be equally encompassing, examining “solutions” in their totality – constraints, benefits, and needs. As such, an important assumption of the at-scale approach behind the Learning by Doing Initiative is that different organizations operating in the hygiene sector need to collaborate in order to develop a common agenda, complement efforts, increase coverage and bring efficiency to the system. The role that organizations play in the system and the relationships that they have with other stakeholders in an important aspect of making the system function more efficiently. Questions that are usually asked in the application of a systems-approach to partnership develop are: 1) what (relevant) organizations to achieve scale have little connection to the rest of the system? 2) How closely connected are organizations *within* a stakeholder group (bonding ties)? 3) How closely connected are organizations *across* stakeholder groups (bridging or linking ties)? 4) What opportunities are there for facilitating connections among organizations (both within and across stakeholder groups)? 5) What collaborative actions results from the network? And 6) how did inter-organizational relationships change over time, including development of new relationships and coalitions, new organizations becoming engaged and the overall structure of the network.¹ This indicator focused on the quality of the relationships between organization that belong to the Learning by Doing Initiative and track the extent to which bonds within relationships that existed prior to the initiative get strengthened and if ties with organizations previously not connected get developed. The assumption being that as these different ties improve, the system becomes more efficient and as a result reaching scale is easier to attain.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 5, IR Partnerships to facilitate coordinated action at regional and district levels fostered				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual				
<p>Indicator Description (Definition)/calculation: Collaborative, increased communication and sustainable interaction among stakeholders will lead to positive impact on the uptake of hygiene practices at the household level. Two different types of linkages may be developed: bonding and bridging. Bonding describes the links and relationships between representatives of organizations with <i>similar outlooks and objectives</i> (private companies, religious organizations, women’s organizations, youth organizations, health sector institutions). This can include a range of types of groups - from guilds and clubs, to credit groups and cooperatives to communities and interest/stakeholder groups. Bridging describes the capacity of groups to make linkages and have relationships with others that may have different views and belong to different stakeholder groups (e.g., bridging between private companies and religious groups; between women’s associations and artisan associations building latrines). Bridging ties cut across social divides such as religion, ethnicity, socio-economic status. A social capital measurement will be undertaken. Different organizations working in the WASH sector and attending the WSRs will be interviewed.</p>				

¹ Acharya, B K, . Morocco, MAPs and Centrality: Building Social Capital Through SCALE. AED, Year 1

They will have to rate the exchange of information that occurs between them and their collaboration to implement programs/activities together. This information will be plotted on charts showing the links and the strength of links between interviewed organizations. Color coding will be used to distinguish sub-categories of stakeholders: health, education, agriculture, donors, private sector, NGOs, Bonding will refer to links developed or strengthened within groups and bridging will refer to such links across groups.

Data Source: Collaborating surveys filled out by all WSR participants asking respondents from the organizations to rate their relationships with other organizations as a whole. Also, in-depth interviews with a sample representative of partners. Excel sheets and UCINET data files developed and analyzed.

Data Analysis: Analysis of existence of linkages and scale score of the linkage between organizations.

Issues/Limitations: The unit of analysis is the organization and representatives responding for an organization may change over time. The assumption is that the WSR participant may be the best informant of the relationship his/her organization has with partner organizations. HIP will attempt to relate to the extent possible the impact that bonding and/or bridging has on implementation of hygiene actions. That relationship may be established qualitatively.

of strategies/guidelines developed, distributed and used 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)

Rationale/Critical Assumptions for Indicator.

Participating organizations need to have guidelines that can be used to define work plans, promotional activities and M&E activities just as much as a teacher needs a teacher manual or a student needs a textbook. The existence of these documents will facilitate any training efforts as well as the application of new skills to project implementation.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 6, IR Institutional capacity among public sector and civil society partners to implement WASH program developed				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual		Developed Distributed Used	Developed Distributed Used	Developed Distributed Used
Indicator Description (Definition)/calculation: The negotiated SOW between WSP and HIP indicated that several strategies/guidelines needed to be developed to facilitate the implementation of the Learning by Doing Initiative. Examples were: Implementation Guidelines for the Hygiene and Sanitation Strategy (tools and materials included); Regional Action Plan for coordinated hygiene improvement; Regional Capacity Building Strategy; Capacity Building Modules for non Hygiene and Sanitation Government and NGO Personnel; Strengthened Health Extension and Community Health Volunteer Training Modules; Strengthened Pre-Service Training Modules for Nurses and Teachers; Regional and woreda-level Advocacy Strategy; etc. This indicator focuses on the production, distribution and use of these documents.				
Calculation: # out of a total #				
Data Source: Project records and interviews with users				
Data Analysis: Enumeration and distribution by target agency				
Issues/Limitations: Use of materials will prove to be harder to measure as it will require contacting different officials receiving the documents, or a sample thereof, to determine if they are being used.				

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

Rationale/Critical Assumptions for Indicator. Competencies of educators need to be developed to create the basis for promotional efforts to be implemented as expected. New hygiene promotion messages and strategies to promote hygiene practices need to be adopted by educators both at the institutional and the community levels.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 7, IR Institutional capacity among public sector and civil society partners to implement WASH program developed				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
<p>Indicator Description (Definition)/calculation: "Trainees" refer to individuals who have participated in one or more training events and may include Health Extension Workers, Community Health Volunteers, school teachers, etc. The training events may be formal training activities. "Guidelines" refer to the written criteria adopted public and private sector partners implementing the Learning by Doing Initiative and described under Indicator 6. Mastering refers to the acquisition of knowledge and may be measured through a knowledge test. Competency usually includes knowledge and skills. If the training was imparted to develop skills, competency measures will be used. Trainees will determine which test scores will be used to certify trainees as being sufficiently competent. For example, that score may be 80% or 90%, if the training is done in tiers, master trainers may be required to have a higher level of knowledge or competency as they will be expected to replicate the training.</p> <p>If a percent is being reported, this indicator is calculated as follows.</p> $\frac{\text{\# of trainees mastering knowledge/skills as determined by the project}}{\text{Total \# of trained providers evaluated}} \times 100$				
<p>Data Source: Administrative records to determine the total number of trainees and written tests and competency tests which may be pre vs. post training measures.</p>				
<p>Data Analysis: Knowledge and competency scores per trainee. Accepted accurate knowledge and competency score levels may be established in advance. For example, any trainee obtaining a score of 80% on a knowledge test conducted after training may be considered to have mastered knowledge. In this instance, only trainees with a knowledge score of at least 90% would be considered.</p>				
<p>Issues/Limitations: Different institutions imparting the same training should use the same tests. Otherwise, lack of standardization across training institutions will limit the comparability of data across institutions. The definition of what is an acceptable score to determine mastery should also be adopted across training institutions and partners. The knowledge/competency tests developed must reflect the guidelines under use, and will serve as an indirect way of determining if the guidelines are in fact put to use for training purposes.</p>				

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

Rationale/Critical Assumptions for Indicator: Teachers at the elementary school level in the region of Amhara will be trained to use hygiene materials to promote appropriate hygiene and sanitation practices among households, including hand washing with a cleansing agent at critical junctures, safe disposal of human excreta and household water treatment and storage. Teachers trained in the use of these materials need to use them to have an impact on hygiene practices among students and their families.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 8, IR Hygiene and sanitation program at woreda level				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
<p>Indicator Description (Definition)/calculation: A study will be conducted on an annual basis in schools located in randomly selected kebeles in three sampling categories depending on the level of involvement of WSP/HIP in hygiene promotion: high direct, low direct and indirect involvement. One school per kebele will be visited by interviewers where selected teachers will answer questions about training they may have received in the use of teaching materials pertaining to hygiene and sanitation, and the use that they are making of those materials.</p> <p><u>Calculation: # of teachers trained in hygiene promotion materials in selected schools using materials</u> x 100 <u># of teachers trained in hygiene promotion materials in selected schools</u></p>				
Data Source: Interviews with teachers				
Data Analysis: Raw frequencies used to calculate percentages				
Issues/Limitations: Self reported data. Triangulation will add costs to data gathering efforts.				

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

Rationale/Critical Assumptions for Indicator: Trainees must put to practice what they learn. Considerable effort is being made to train via a cascade approach different household visitors and promoters affiliated with different sectors involved in improving the hygiene and sanitation practices of Amhara residents, mainly from the health sector. The training focuses on the importance of safe human excreta disposal and hand washing with cleansing agent at critical junctures and in developing competencies to ignite changes in improved hygiene and sanitation including how to conduct a community led total sanitation program, how to conduct home visits focused on hygiene promotion, and how to negotiate (MIKIKIR) small doable actions.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 9, IR Hygiene and sanitation program at woreda level				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
<p>Indicator Description (Definition)/calculation: A household visitor/health promoter is an employee affiliated usually with the Ministry of Health and in charge of implementing multiple health programs at the community level. The hygiene and sanitation program would be on those programs. The tools introduced by the Learning By Doing Initiative are essentially associated with community led total sanitation (CLTS) and the negotiation of small doable actions. There will be a random selection of woredas and kebeles within those woredas. Interviews will be conducted with kebele managers and promoters themselves to determine if the promoters have been trained and what tools are they using to promote hygiene and sanitation improvement in their respective areas of work. Calculation: $\frac{\# \text{ of interviewed promoters trained and using tools}}{\# \text{ of interviewed promoters that were trained}} \times 100$</p>				
Data Source: Interviews				
<p>Data Analysis: Analysis of frequencies of questions such as those below: -What type of training have you received in the past 12 months to develop your skills in hygiene and sanitation promotion? -What topics were addressed during that training? -How useful was that training to implement current hygiene promotion activities you are involved with? -What community based activities are you implementing to reduce open defecation? -What strategies do you use to get communities to stop open defecation? -What strategies are you using to get individuals households to practice safe disposal of human excreta? Hand washing at critical times?</p>				
Issues/Limitations: Reliance on self reports				

% of annual budget spent by targeted woredas (10)

Rationale/Critical Assumptions for Indicator. Different donors will be making funds available for behavior change activities to participating woredas in Amhara. The funds will be made available directly to woredas without having to go necessarily through the regional bureaus in Bahir Dar. The absorptive and implementation capacity of the different woredas may vary from woreda to woreda and it will important to keep track of expenditures at the woreda level. Accounting systems need to be efficient in order to provide timely information of expenses. This indicator serves to track the extent to which the money allocated for behavior change (BC) activities is being spent as allocated and there are no delays in implementation.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 10, IR Hygiene and sanitation program at woreda level				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual		100%	100%	?
Indicator Description (Definition)/calculation:				
Calculation: $\frac{\text{Total amount of dollar allocation for BC activities per woreda spent in a give fiscal year}}{\text{Total dollar allocation for BC activities per woreda in a given year}} \times 100$				
Data Source: Project records				
Data Analysis: Information will be collected on a woreda basis, woreda by woreda, and it can be aggregated to determine the regional average. Outliers, woredas with a marked difference from the average, will merit further analysis.				
Issues/Limitations: Accounting systems at the woreda level need to be operational and effective to be able to provide timely data.				

% of targeted woredas that implemented WSRs (11)

Rationale/Critical Assumptions for Indicator. Whole System in a Room (WSR) refers to an tool requiring WASH stakeholders at the woreda level to come together to develop a common action agenda chart will serve as the basis for future collaborative action that may include collective work planning, implementation and/or evaluation of program activities. A WSR was held in Amhara to kick off the Learning by Doing Initiative at the regional level. Six priority areas for a common action agenda for stakeholders present at that meeting was generated by participants. The priority areas include: additional advocacy activities to gain political commitment in support of the WASH program, increased media promotion for the WASH sector, expanded resources to implement WASH activities, decentralization of planning to the community level, increased focus on women’s empowerment and gender issues, and resource management/recycling. Local action agendas and priorities may vary from the regional agenda, making WASH interventions more focused and effective.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator11, IR Hygiene and sanitation program at woreda level expanded				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual		3/3	8/8	
<p>Indicator Description (Definition)/calculation: WSR are stakeholder meetings. This indicator calls for the kick off meetings at the woreda level to be tracked. There are just a few woredas that are targeted for such meetings through FY 08. The assumption is that there would be at least one WSR at the woreda level per each one of the eleven zones in the region. The 11 WSR would be sponsored by the Learning by Doing Initiative. It is expected that additional WSR may be held in other woredas within each on those zones, but that they will be sponsored by the Regional Bureaus in Amhara.</p> <p>Calculation: $\frac{\text{\# of targeted woredas with inter-institutional stakeholder meetings implemented in the year for which it was planned}}{\text{\# of targeted woredas for that year}} \times 100$</p>				
Data Source: Program/project administrative records.				
Data Analysis: Simple enumeration of WSRs held at the woreda level and of the total number of woredas targeted				
Issues/Limitations: Piggybacking onto WSP’s work plan will have an impact on how fast the expansion of activities at the woreda level will occur.				

% of targeted woredas with joint WASH plans stimulated by WSRs (12)

Rationale/Critical Assumptions for Indicator

The systems approach adopted by the Learning by Doing Initiative assumes that partnerships add value to the development process as they permit stakeholders to work together, complement each other's activities and disseminate the same messages to an increasingly larger audience. Any collaboration among partners should be reflected in the work plans. A joint action plan would be ideal. In its absence, individual work plans should have actions being implemented jointly. Because there are WSR implemented at the woreda level, this indicator call for WASH plans also at that level. As the WASH program evolves throughout Amhara, indicators that measure the growth of the partnership, an increase in resources leveraged, or additional geographic coverage, and/or its replication can be adopted. This indicator therefore was selected to reflect a basic strength of the partnership as demonstrated in the collaborative preparation of the country work plans.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 12, IR Hygiene and sanitation program at woreda level				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual				
Indicator Description (Definition)/calculation: It is assumed that woredas have annual work plans and that meetings may be held where partners come together to do that collective planning. There should be as many collective/joint woreda plans as there have been woreda WSRs. Calculation: $\frac{\text{\# of woredas with joint work plans}}{\text{\# of woredas with WSRs}} \times 100$				
Data Source: Program records and progress reports				
Data Analysis: Review of the work plans generated by the different targeted woredas has to occur. There may be one joint work plan for different agencies or the individual plans of involved agencies need to reflect collaborative actions implemented in a coordinated fashion.				
Issues/Limitations:				

of targeted woredas implementing collaborative actions between implementing partners (13)

Rationale/Critical Assumptions for Indicator: The work plans that may have been developed jointly by partners or the work plans developed individually by partners but which reflected joint actions must be implemented. Collaborative actions may help increase coverage and may facilitate the delivery of the same messages through different channels, increasing the chances of saturating the environment and developing the sense of a social norm which will influence adoption of practices.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 13, IR Hygiene and sanitation program at woreda level				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
<p>Indicator Description (Definition)/calculation: Work plans may list activities, but may also list outputs and deliverables that are associated with the implementation of those activities. In addition, there must be budgets that accompany the work plans where the costs of the activities are presented. To determine if the activities have been implemented expenditures, outputs and deliverables must be analyzed to determine if the collaborative actions included in the work plans have been implemented. A scoring sheet for each collaborative actions may be established to determine if the collective actions planned were not implemented (score of 0), partially implemented (score of 1) or fully implemented (score of 2).</p>				
<p>Data Source: Work plans, pipeline analysis, progress reports, and interviews with project managers can help generated the needed information to establish the implementation scores mentioned above.</p>				
<p>Data Analysis: The assumption is that WSRs may have led to collective work planning or collaborative actions among partners. The joint plans needs to be made available as well as individual work plans of partners participating in supportive actions. The additional data sources must be made available. The analyst will isolate collaborative actions planned and use expenditure reports, progress reports, and interviews with managers and even field visits, if possible, to determine if the actions have been implemented.</p>				
<p>Issues/Limitations: Difficulty in obtaining the needed information from secondary data and the lack of resources to conduct field visits may limit the ability to verify if the jointly developed plans or the collaborative actions have been implemented. Cross validation of information from different sources may prove to be difficult or contradictory.</p>				

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

Rationale/Critical Assumptions for Indicator: The Learning by Doing Initiative will promote in targeted woredas the use of different behavior change communication (BCC) interventions to increase demand for hygiene products that can facilitate the performance of needed hygiene actions and help reduce diarrheal morbidity and mortality and also improve environmental conditions. The BCC intervention may be part of community led total sanitation initiatives, negotiation initiatives where individual households can select which technology better suits their needs and resources or school-based community outreach activities. These BCC efforts need to complement the infrastructure that may be put in place by different partners. Within the Health Bureau, the construction of latrines is accompanied by the promotion of hand washing stations next to the latrines and HEWs and community volunteer workers are expected to promote hand washing practices at critical times. Consequently, the integration of hardware and software elements of the Hygiene Improvement Framework seem almost as a given. However, the installation of water points may not always be accompanied by appropriate hygiene promotion efforts related to water handling at the household level. The Learning by Doing Initiative, however, will ensure that appropriate hygiene promotion efforts complement hardware investments. This indicator tracks the software aspects of hygiene improvement in Amhara.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 14, IR Hygiene and sanitation program at woreda level				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
<p>Indicator Description (Definition)/calculation: One of the principles of at-scale programs is that multiple venues will be used to convey equivalent hygiene messages. In fact, “to hammer the message home” and saturate the environment with hygiene promotional messages, target audiences must hear those messages from different sources and be exposed to them in the different contexts in which they operate. Integration in the case of this indicator refers to different channels communicating the same information. Equivalent hygiene messages about sanitation, hand washing and water treatment or storage, for example, will be delivered through interpersonal channels, mediated channels or school-based programs. It will be assumed that integration occurs when all communication channels mentioned will be in operation in the targeted woredas. The messages will be delivered by health education workers, village volunteers, peers, teachers and other promotional materials such as posters, flipcharts, etc. Furthermore, the venues used to convey the messages will be mutually reinforcing and supportive. Outreach workers associated with the Ministry of Water Resources, for example, will deliver similar messages to similar workers associated with the Ministry of Health or to school-based programs implemented with the support of the Ministry of Education. The hygiene promotion may occur prior, during or after investment in infrastructure made by households, communities or partner institutions.</p> <p>Agencies working in setting up or operating water points are likely to have mechanisms to inform the community how to maintain the water points operational. In those cases, information disseminated to community members about how to maintain the hardware should also contain</p>				

information about hygiene practices. As such, the Bureau of Water may be delivering messages about proper water handling from the source to the household, water treatment of water at point of use if need be, and proper storage of water from a protected source or water treated at home. Such promotional efforts should also address other hygiene concerns such as the need to wash needs at critical moments for child caretakers and other family members and to dispose of human feces in a hygienic fashion.

Calculation: $\frac{\# \text{ of woredas where hygiene promotion complements water point construction}}{\# \text{ of woredas benefiting from water point construction}} \times 100$

Data Source: Triangulation will be used to generate the needed information. Program records reflecting what software actions are implemented by different government offices will be one of the data sources used. Another will be household surveys that will be conducted to track hygiene practices by an independent evaluation agency. This information may be complemented by data collected via field observation guides used in field visits paid to sample kebeles by supervisors associated with participating ministries and bureaus.

Data Analysis:

A staggered approach is likely to be used to expand coverage throughout the Amhara Region. A few woredas will be targeted first, and Partner involvement will facilitate expansion of activities to other woredas in subsequent years. Households visited through a sample survey will come from woredas targeted at different stages of program expansion. Comparisons of different channels being used to generate saturation will be established between woredas targeted during the first phase of program implementation vs. woredas lined up for subsequent implementation thus serving as time controls.

Issues/Limitations: MOUs between implementing agencies need to be in place for hygiene promotion efforts to be mutually reinforcing and harmonized. Triangulation may prove to be problematic as data obtained may be of different quality and double counting needs to be avoided. The size of the woredas and the difficulty of checking what happens at every kebele per woreda may make it difficult to generalize for woredas.

% of households using improved sanitation facilities meeting minimum standards by woreda (15)

Rationale/Critical Assumptions for Indicator: BCC efforts are expected to have an impact on sanitation uptake at the household level. The Sanitation and Hygiene Protocol (HSP) sets minimum standards for household sanitation in Ethiopia, including Amhara, and they coincide with international definitions of what constitutes improved household sanitation. This indicator tracks over time both access and use of improved sanitation facilities.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 15, IR Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	36%			
Actual				
<p>Indicator Description (Definition)/calculation: The minimum standard for household sanitation defined by the HSP consists of a non-subsidized improved traditional latrine with features such as smaller pits, covers over squat hole and hand washing facilities. Subsidies may be possible in situations such as loose soil where pit lining is required, in rocky terrain or in high water table areas where a raised latrine is required.</p> <p>$\frac{\text{\# of households in representative meeting minimum standards}}{\text{Total \# of households in representative from targeted woredas}} \times 100$</p>				
<p>Data Source: Household surveys including questions such as: What kind of toilet facility do members of your household usually use? Please show me where you go to defecate (record type of toilet facility); Is it being used/ (Observe if facility has signs of being used such as: path to latrine seems to have been walked on, evidence of anal cleansing, feces in the pit); How many families use the toilet facility that your family uses? Who provided the funding for the construction of the latrine? If subsidy received, what was the subsidy used for?</p>				
<p>Data Analysis: Select out households not meeting minimum standards from analysis and break down information by rural vs. urban location and woreda.</p>				
<p>Issues/Limitations: DHS data helped to define the needed sanitation coverage prevalence that needs to be covered by the survey. That information is for the entire region of Amhara and not for specific districts or woredas. No estimate offered broken down by urban/rural split. Not all families may allow the observation of toilets to take place.</p>				

% of hw stations near improved sanitation facilities meeting minimum standards with appropriate hw supplies by woreda (16)

Rationale/Critical Assumptions for Indicator.

Hand washing with a cleansing agent (soap or ash) at critical times is an important aspect of the hygiene promotion efforts suggested by the Learning by Doing Initiative, particularly in households with children under 5. The Hygiene and Sanitation Protocol (HSP) requires that a hand washing station be set up near the latrine, and there is evidence suggesting that the presence of soap near a latrine or in the yard of a compound is a good predictor of hand washing practices at critical times. The critical times include hand washing with a cleansing agent after potential risk of contact with fecal content such as after defecation or after cleaning a child. This indicator reflects both the HSP as well as some of the existing evidence on the conditions that facilitate hw practices at critical times.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 16, IR Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0.3%			
Actual				
<p>Indicator Description (Definition)/calculation: The minimum standard for household sanitation defined by the HSP consists of a non-subsidized improved traditional latrine with features such as smaller pits, covers over squat hole and hand washing facilities. Subsidies may be possible in situations such as loose soil where pit lining is required, in rocky terrain or in high water table areas where a raised latrine is required. Hand washing stations may be simple and include a tippy tap hanging from a post. Two types of tippy taps may be common, one being a bottle pierced at the bottom permitting water to be released when the cap is opened, and the other being a bottle that can be tilted with a string for pouring. The appropriate supplies that the hand washing station should have are water and ash or soap. Tippy taps should have water in them at the time of the house visit, and ash or soap should be readily available.</p> <p>$\frac{\text{\# of households in representative sample meeting minimum standards with both water and cleansing agent at hw station}}{\text{Total \# of households in representative sample meeting minimum standards with hw stations near latrines from targeted woredas}} \times 100$</p>				
<p>Data Source: Household survey. Examples of questions that may be used include the following: Can you show me where you usually wash your hands and what you use to wash hands? OBSERVE: What is the hand washing device? OBSERVE: Was water available at time of interview? OBSERVATION ONLY: IS THERE SOAP OR DETERGENT OR LOCALLY USED CLEANSING AGENT?</p>				
<p>Data Analysis: Households that have minimum standards plus a hw station near the latrine should meet both criteria: presence of water that can be poured and presence of a cleansing agent.</p>				
<p>Issues/Limitations: Hand washing practices are inferred given that the conditions that may facilitate hw at least during some of the critical times are in place. Baseline information has indicated that very few households meet the combination of criteria that are included in this indicator:</p>				

presence of a latrine meeting minimum standards, hand washing station in household located in proximity to this latrine, and with two supplies needed to practice hand washing: soap or ash and water. There are many households that have hand washing stations in the house even though not always with a cleansing agent. For these households change may be easier. They would have to install a second hand washing station with needed supplies near latrines that may exist.

% of caretakers of children under five washing hands with cleansing agent during at least two of the critical junctures (17)

Rationale/Critical Assumptions for Indicator.

Hand washing with a cleansing agent (soap or ash) at critical times is an important aspect of the hygiene promotion efforts suggested by the Learning by Doing Initiative, particularly in households with children under 5. This indicator goes beyond the presence of needed supplies and focuses on whether the practice promoted was in fact performed. It limits to capturing at least two of the critical junctures under the assumption that some caretakers may be already doing it at least one of the junctures and seeks to capture incremental changes in the right direction. Defining hand washers at all critical junctures would make the requirements too stringent and would make it impossible to capture changes in promoted hw practices as they occur. Contrary to other sites where the requirement is to hand wash with soap, in the case of Ethiopia the definition is larger to include different cleansing agents. Ash is the commonly used cleansing agent at the beginning of the promotional efforts supported by the Learning by Doing Initiative.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 18, IR Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	2%			
Actual				
<p>Indicator Description (Definition)/calculation: Caretakers are individuals that are in charge of seeing after children. These individuals may be mothers, fathers, grandparents, etc. Critical junctures are: after defecating, after cleaning a child, before preparing food, before feeding a child, before eating</p> <p><u># of caretakers reporting hw with cleansing agents at least during two critical junctures x 100</u> Total # of caretakers interviewed</p>				
<p>Data Source: Household survey. Examples of questions that may be used include the following: Questions that may be used: Please think about what happened yesterday morning. Did you use soap at anytime yesterday morning? The first time you used a cleansing agent, what did you use it for? Did you use a cleansing agent at any other occasion that morning What for? Any other time? What for?</p>				
<p>Data Analysis: Each critical juncture needs to be counted separately and then data from each juncture accumulated to create a scale of hw with cleansing agent performed under one, two, three, four and five junctures.</p>				

Issues/Limitations: Although the emphasis is on the use of a cleansing agent, and not on hand washing, it continues to be a self-reported measure. In contexts where the hygiene promotion focuses on the use of soap, the questions proposed are limited to soap use. In the case of Ethiopia, the questions speak of a cleansing agent. Pre testing of the questionnaire in the local language will be **required given these** modifications.

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

Rationale/Critical Assumptions for Indicator.

In addition to access, use and maintenance of sanitation facilities are elements to include in any evaluation of a sanitation promotion program. Maintenance will have an influence on facility use.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 18, IR Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned				
Actual				
<p>Indicator Description (Definition)/calculation: Although maintenance is divided into functionality and cleanliness, the focus of this indicator is on functionality. Functionality of the latrine is connected to both the infra and the superstructure. In rural settings, improved pit latrine fills up and a new pit needs to be constructed. Old pits must be covered with the dirt from the new latrine. In peri-ruban settings, as indicated by the HSP, pits and vaults must be emptied as well to maintain functionality. In either case, urban or rural, superstructures also need to be maintained.</p> <p>$\frac{\text{\# of households with access to sanitation facilities in representative sample where infrastructure and superstructure is operational}}{\text{Total number of households with access to sanitation facilities in representative sample}} \times 100$</p>				
<p>Data Source: Household surveys. Examples of questions include the following.</p> <p>Rural Settings How long ago was the latrine pit constructed? Was it constructed to replace a pit that existed before? What motivated you to construct a new pit? OBSERVE: Is slab in good condition? OBSERVE: Is superstructure in good condition?</p> <p>Urban Settings When was the last time you emptied the pit/vault? How frequently do you empty it? OBSERVE: Is slab in good condition? OBSERVE: Is superstructure in good condition?</p>				
<p>Data Analysis: Break down analysis by rural and urban settings. Both the infrastructure and the superstructure need to meet established functionality criteria for household to be classified as practicing required sanitation maintenance.</p>				

Issues/Limitations: Partial reliance on self reports. The maintenance of the infrastructure may not come in but months after the construction of the initial latrine would have taken place. There may be not need to consider this indicator for recently constructed latrines.

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

Rationale/Critical Assumptions for Indicator.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 19, IR Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	5%			
Actual				
<p>Indicator Description (Definition)/calculation: Depending on the water treatment technologies that are promoted in Amhara in areas without protected water sources, effective household water management is defined as:</p> <ol style="list-style-type: none"> 1. presence of chlorine residual in household drinking water storage container; and/or 2. presence of a covered ceramic water filter in an accessible spot in the kitchen, with filter in place and water in the lower container; and/or 3. presence of multiple solar disinfection (SODIS) bottles exposed to full sunlight; and/or 4. self reported boiling and presence of boiled water kept in safe container (as described further down) <p>$\frac{\text{\# of household reporting to treat drinking water that show evidence of technological options being used}}{\text{Total \# of households in representative sample without self reported access to protected water sources}} \times 100$</p>				
<p>Data Source: Household surveys. Examples of questions that can be used follow.</p> <p>Do you currently use any method or product for treating your drinking water? What method or product do you currently use to treat your drinking water? May I take a sample of your drinking water to test for chlorine? (If chlorine solution, PuR or chlorine tablets are used) Test for presence of residual chlorine and record results (orthotolidine test) Can I see your drinking water filter? (If filters are used) Observe: : is the filter covered with a lid? is the filter easily accessible? does the filter have water in the bottom unit? does the filter have a ceramic filter installed in the unit? Can I see the bottles you use to practice solar disinfection? (If solar disinfection is practiced) Observe: Are there multiple SODIS bottles exposed to full sunlight sufficient for family size? When did you boil your water? (If boiling is practiced) How long did you boil it for? Can you please show me where you keep your boiled water? Did you transfer the boiled water to another container to store it after boiling?</p>				

Data Analysis: Different criteria must be met depending on the technology used.

Issues/Limitations: Even though simple to use, chlorine residual tests will be needed for household reporting the use of chlorination. Boiling remains a self-reported practice.

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

Rationale/Critical Assumptions for Indicator: Handling of water treated in the household may re-contaminate it. Treated water should be stored in containers that meet certain characteristics to prevent recontamination of water after treatment has occurred.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 20, IR Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	37%			
Actual				
Indicator Description (Definition)/calculation: Containers used for storing treated water in the household should have solid caps/lids and have narrow mouths that would prevent the introduction of utensils that can contaminate the water. They should be different from containers that may be used to fetch water and where untreated water is kept.				
Data Source: Household surveys. Examples of possible questions follow. Do you store drinking water in your house? May I see where you store it? Observe: How many containers are used? Are they all covered or closed with a solid cap or lid? Do containers have a narrow mouth AND/OR a tap? Are these the same containers that you use to fetch water? How often do you clean them? How do you clean them?				
Data Analysis: Three criteria must be met: use of different containers than those used to fetch water, solid lids/caps and narrow mouths.				
Issues/Limitations: If incremental change is of importance, data analysis may consider the presence of containers with an open mouth that are covered with hard covers as well as the existence of a mechanism for water retrieval that helps guarantee the quality of treated water, particularly when the water was boiled.				

% of woredas/kebeles receiving award(s) for completion of sanitation/hygiene targets (21)

Rationale/Critical Assumptions for Indicator: Champion community approaches may be adopted to reward communities for reaching sanitation/hygiene targets in order to maintain practices over time. If those approaches are adopted in Amhara, this indicator tracks the extent to which such approach is put to practice and communities are receiving awards for achieving objectives they set for themselves. The use of this approach may be possible given the fact that community led total sanitation may be promoted in given woredas and/or kebeles where the use of a community based sanitation approach is feasible.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 21, IR Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
Indicator Description (Definition)/calculation:				
<p>Woredas and kebele may have defined the sanitation/hygiene targets that they intend to accomplish in one year. They may include the number of households that would be constructing sanitation facilities that meet minimum standards within one specific year. Targets could also include the number of households in a given community that maintain existing latrines according to set standards during that same period.</p> <p>$\frac{\text{\# of woredas that received awards for completion of sanitation/hygiene targets}}{\text{total number of woredas eligible for receiving awards}} \times 100$</p> <p>$\frac{\text{\# of kebeles that received awards for completion of sanitation/hygiene targets}}{\text{total number of kebeles eligible for receiving awards}} \times 100$</p>				
Data Source: Program records				
Data Analysis: Simple enumeration of woredas/kebeles receiving awards over the total number that is eligible.				
Issues/Limitations:				

% of water user committees with women as treasurers (22)

Rationale/Critical Assumptions for Indicator: The at scale efforts in Amhara will integrate the activities traditionally implemented by different government agencies. Up to now, the Ministry of Water Resources has responsibilities over water utilities and the Ministry of Health has responsibility over sanitation and hygiene promotion. The Learning by Doing Initiative has brought these two government agencies together and is helping to develop among them a common agenda. An issue raised by the Bureau of Water Resources in Amhara is their concern for the maintenance of the infrastructure that is put in place and consider the involvement of women in water user groups an important aspect of the maintenance strategy. However, their preference is that women not only participate in the water user group as members but that they hold positions of responsibility and will engage in an effort to promote women playing the role of treasurers within the committees of water user to help facilitate the collection and use of water user fees for the operation and maintenance of the water utility constructed.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 22, Adoption of hygiene practices or their antecedents at the household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
Indicator Description (Definition)/calculation:				
$\frac{\text{\# of water user committees with female treasurers}}{\text{Total \# of water user committees in intervention area}} \times 100$				
Data Source: Program records				
Data Analysis: To develop evidence in favor of the assumption that female treasurers will be more effective than male treasurers, information on the finances of water committees and of water utility downtime will be collected. Analysis will be conducted to determine if committee with female treasurers: a) have more healthy finances with all needed user fees being collected, and b) generate sufficient resources to cover for all maintenance costs thus reducing the amount of down time of water points. Efficient maintenance will assume that water fountains that breakdown will be operational within 10 consecutive days of the breakdown.				
Issues/Limitations: The involvement of women as treasurers may contribute, but does not necessarily guarantee adequate collection and maintenance of water points. The relationship between female treasurers and fee collection and water point maintenance will need to be more fully documented. Information about the presence of women in that capacity will be used to explore further the financial and operational implications for water points.				

% of students with increased knowledge of promoted hygiene practices by woreda (23)

Rationale/Critical Assumptions for Indicator: Hygiene knowledge and hygiene practices are related, although knowledge may need to be combined with other behavioral determinants to influence behavior. One aspect of knowledge that is considered important is related to the health consequences of appropriate hygiene, as well as the financial burden for families of disease, particularly of water borne diseases. It is also assumed that knowledge about why, when and how to practice hand washing is an antecedent to appropriate hand washing practices. By the same token, it is also assumed that appropriate knowledge about how to treat and how to store drinking water may contribute to appropriate point of use (POU) practices, and knowledge about the different options available to stop open defecation may influence the adoption of sanitation practices that are suitable to one's resources. In addition, children may be good sources of information for families, and providing hygiene related information to children in school may be conveyed to parents and contribute to hygiene practices at home. For children to transfer knowledge to parents, however, children may need to implement activities within the household or at school that engage parents.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 15, IR Hygiene and sanitation program at woreda level expanded				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
Indicator Description (Definition)/calculation: Knowledge scores on standardized tests that reflect hygiene curricula introduced/improved by the Learning by Doing Initiative in Amhara.				
Calculation: Number of students showing knowledge gains from pre to post test over the total number of students tested.				
Data Source: Pre-post knowledge tests of students exposed to hygiene curricula				
Data Analysis:				
Issues/Limitations:				

% of targeted schools complying with child/latrine ratio defined by the national Protocol for Hygiene and Sanitation by sample strata (24)

Rationale/Critical Assumptions for Indicator: The Hygiene and Sanitation Protocol (HSP) promotes sanitation at the household and institutional levels. One of the targeted institutions are schools. HSP suggests that the woreda health office will ensure that all schools in its jurisdiction will have separate latrines for girls and boys with hand washing facilities supplied with water and soap at all times.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 23, Adoption of hygiene practices or their antecedents at household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
Indicator Description (Definition)/calculation:				
Ratios of students per latrine per the Ethiopian Plan for Accelerated and Sustained Development to End Poverty are as follows:				
Girls to latrine stance ratio < 50:1				
Boys to latrine stance ratio < 75:1				
Boys to urinal ratio <75:1				
Boys: $\frac{\text{\# of schools complying with boy/latrine ratio per HSP}}{\text{Total number of schools in sample}} \times 100$				
Boy Urinals $\frac{\text{\# of schools complying with urinal ratio} \times 100}{\text{Total number of schools in sample}}$				
Girls: $\frac{\text{\# of schools complying with girl/latrine ratio per HSP}}{\text{Total number of schools in sample}} \times 100$				
Data Source: School visit to selected schools in approximately 100 kebeles 22 woredas				
Data Analysis: Frequency distribution of attribute to calculate percentage				
Issues/Limitations:				

% of targeted schools with water supply (25)

Rationale/Critical Assumptions for Indicator: The Government of Ethiopia is interested in schools having access to water supply. This indicator track the extent to which that objective is being met in the Amhara Region.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 24, Adoption of hygiene practices or their antecedents at household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual				
<p>Indicator Description (Definition)/calculation</p> <p>Visits will be paid on an annual basis to a sample of schools in Amhara. Those schools will come from 22 woredas that fall into three categories depending on the level of hygiene promotion implemented by the WSP/HIP Learning by Doing Initiative. These categories are: high direct involvement, low direct involvement and indirect involvement. An observation survey will be implemented in these schools and the existence of a water supply to visited schools will be captured via that survey.</p> <p>Calculation: $\frac{\# \text{ of visited schools with water supply}}{\# \text{ of visited schools}} \times 100$</p>				
<p>Data Source: Spot checks via school visit to selected schools in approximately 100 kebeles 22 woredas</p>				
<p>Data Analysis: Frequency distribution of attribute to calculate percentage</p>				
<p>Issues/Limitations: The type of water supply is not being tracked. The 22 woredas are likely to be split into three categories: high intensity, direct involvement and indirect involvement. The sample of schools is connected to the sample at the household level.</p>				

% of targeted schools with hw stations that have running water and cleansing agent (26)

Rationale/Critical Assumptions for Indicator.

In addition to the installation of latrines meeting minimum standards, the Hygiene and Sanitation Protocol calls for schools to have hand washing stations allowing children at school to wash their hands at any of the critical junctures. The indicators tracks to see if the hand washing stations exist and if they have the needed supplies.

Task 2: Measuring Scale in Ethiopia				
M&E Indicator 25, Adoption of hygiene practices or their antecedents at household and institutional levels increased				
Results Data	Baseline	Year 1	Year 2	Year 3
Planned	0			
Actual		Presence of station With water With cleansing agent	Presence of station With water With cleansing agent	Presence of station With water With cleansing agent
Indicator Description (Definition)/calculation: Visits will be paid on an annual basis to a sample of schools in Amhara. Those schools will come from 22 woredas that fall into three categories depending on the level of hygiene promotion implemented by the WSP/HIP Learning by Doing Initiative. These categories are: high direct involvement, low direct involvement and indirect involvement. An observation survey will be implemented in these schools and the existence of hw stations and the presence of needed supplies in visited schools will be captured via that survey. Calculation: $\frac{\# \text{ of visited schools with hw station}}{\# \text{ of visited schools}} \times 100$ Calculation: $\frac{\# \text{ of visited schools with water at hw station}}{\# \text{ of visited schools}} \times 100$ Calculation: $\frac{\# \text{ of visited schools with cleansing agent at hw station}}{\# \text{ of visited schools}} \times 100$				
Data Source: Spot checks during school visits to about 100 kebeles in 22 woredas				
Data Analysis:				
Issues/Limitations: Specialists agree that the quality of water is not important to achieve needed diarrheal reduction impact. Even in cases where piped water is used, the piped water may be contaminated. Yet, tippy taps are designed to pour water over hands as opposed to having individuals dip their hands into a vessel. The 22 woredas are likely to be split into three categories: high intensity, direct involvement and indirect involvement. The sample of schools is connected to the sample at the household level.				

