Scaling Up Rural Sanitation

Learning by Doing: Working at Scale in Ethiopia

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INTRODUCTION

In 2005, an estimated 15.2 million people or 80 percent of the total population of the Amhara Region in Ethiopia lived in rural areas where sanitation-related indicators were low.1 Open defecation was common; handwashing, particularly after defecation, was practiced infrequently; and general housing environments were unsanitary, with cohabitation with animals a common occurrence. There was a high prevalence of health issues correlating to poor sanitation and hygiene such as intestinal parasites, diarrhea, and eye and skin diseases.

In 2005 and 2006, the Water and Sanitation Program (WSP) worked with the Ministry of Health, providing support to design a Sanitation Strategy and On-Site Sanitation protocol. WSP also gained experience in scaling up sanitation by working closely with the Southern Nations, Nationalities, and People’s Regional Government Health Bureau. These experiences and government motivation to change conditions provided an opportunity to design a systematic, community-led approach to implement a sustainable at-scale sanitation program based on the strategy and protocol.

WSP partnered with the Government of Ethiopia, the Amhara Regional Health Bureau, and USAID’s Hygiene Improvement Project (HIP), to design and implement the Learning by Doing Initiative (LBDI), an at-scale project focusing on total behavior change in sanitation and hygiene. The strategy was to launch LBDI at scale (rather than starting small and scaling up), with intensive and refined, and then immediately roll out the tools and approaches to districts region-wide. Water, Sanitation, and Hygiene (WASH) sector partners working in another 90 of the region’s 150 districts supported government efforts to achieve “open defecation free communities,” which reached 5.8 million with promotional efforts and influenced 3.6 million to stop open defecation and use latrines they built after exposure to the learning by doing activities. LBDI launched in June 2006 and was the first at scale initiative of its kind.

PROBLEM STATEMENT

At onset, there were two major challenges with respect to sanitation and hygiene deficits. First, the Government of Ethiopia’s Universal Access Plan called for one hundred percent coverage and inclusion of sanitation. To achieve these very ambitious goals of family health, the Ministry of Health Extension Program developed a sixteen component program, of which seven dealt directly with sanitation and hygiene. However, the actual process to achieve sanitation and hygiene objectives was not developed: step-by-step guidance was not provided, tools were not available, nor were community-led, behavior change approaches harnessed to achieve these goals. Second, political commitment at all levels had focused on sanitation coverage, with less attention given to improving safe water, sanitation, and hygiene practices such as handwashing, safe water storage and handling, and latrine maintenance and usage.

ACTION

Working at the kebele (sub-district) level, LBDI mobilized the community through building the capacity of a cadre of outreach workers, including Health Extension Workers, Agriculture Extension Workers, kebele leaders, and other partners. These training sessions focused on both community mobilization and focused, household-level


Key findings

- Cultivating political will is crucial to achieve widespread, at-scale, successful sanitation projects.
- Consensus building among all actors at all levels in an administrative unit is the entry point to working at scale.
- Developing high quality, evidence-based, tested tools and training manuals can facilitate replication of successful activities.
- Building the capacity and motivation of community-based Health Extension Workers is vital to working at scale.
behavior change tools, and included consensus-building activities with a “whole system” approach to involve all stakeholders engaged in sanitation and hygiene.2

Next, LBDI began to operate through a participatory community mobilization tool known as Community-Led Total Sanitation (CLTS). In CLTS, community members engage in a mapping exercise or “shame walk” to identify open defecation (OD) sites. Further activities demonstrate how OD contaminates food and water sources, leading community members to feel shame and disgust at the realization that through widespread open defecation, they are consuming their neighbors’ feces, which led them to commit to ending the practice of open defecation.

These activities were complemented by a novel approach to interpersonal communication for behavior change: individual and household behavior negotiation was conducted by Health Extension Workers to assess current practices and “negotiate” which sanitation and hygiene options or “small doable actions” were feasible and best suited to each family’s need. The behavior change strategy focused on three behaviors: hygienic disposal of human feces; handwashing with soap at critical moments; and household water treatment and safe storage of drinking water, with an ultimate goal of total behavior change in sanitation and hygiene in the region.

**KEY LESSONS**

Based on implementation to date, several key lessons have emerged:

The combination of CLTS plus individual or household hygiene promotion that focuses on “doable actions” is effective in increasing latrine coverage and reducing open defecation in Ethiopia. Although sanitation and hygiene development is not uniform throughout the learning woredas, latrine coverage in the first two years in many targeted kebeles climbed from as low as 5 percent to as high as 100 percent (Figure 1). Spot assessments of sanitation coverage over thirteen districts indicated an average coverage rate of 80 percent. A systematic and representative endline survey representative of the entire Amhara Region of 20 million showed open defecation dropping from 64 percent to 40 percent (Figure 2). Traditional, unimproved latrine development also improved dramatically—increasing from roughly 17 to 46 percent.

Based on an analysis of endline research conducted in 2010, the chances of owning a latrine were about 9 times higher in households located in villages that participated in a walk of shame (an activity typically during CLTS triggering); 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 their community’s (not just household) health and development).

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2 The “Whole System in the Room” is a task-focused planning meeting that brings together people representing different stakeholder groups to help catalyze linkage and partnerships.

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**BOX 1: CORNERSTONES OF THE LBDI IN AMHARA**

- **Consensus Building**—Regional, district and local workshops termed Whole System in a Room, or WSR were conducted with representatives from all levels of eight main stakeholder groups—Health, Education, Water Resources, Women, Youth and Teachers, Faith Based, Private Sector, and Political Leadership.

- **Alignment of Regional and National Strategies**—The CLTS and Hygiene (CLTS+H) approach is now integrated into the Ministry of Health’s national approach and the National Health Extension Program (HEP) which is cascaded to the regions. Common ground was formed with the Regional Health Bureau to integrate the at-scale sanitation program with the existing HEP where seven out of the sixteen targeted community based programs deal with environmental sanitation.

- **Multi-tiered Advocacy**—WSP/HP and regional partners conducted multi-level advocacy in regions, zones, woredas (districts), kebeles (sub-districts), and gotts (community clusters) to garner broad buy-in.

- **Community Mobilization and Ignition**—Using CLTS tools to spark commitment to change eliminate open defecation forever.

- **Promoting Behavior Change**—Household-level outreach focused on multiple behaviors and doable actions that leveraged community/group dynamics to ignite action.

- **Building Capacity**—A comprehensive capacity-building training focusing on community mobilization, data collection and collation, and negotiation or problem-solving to increase sustained uptake of doable actions at household level was conducted for government-paid Health Extension Workers (HEWs) prominent community-resource people, and volunteer community health promoters (VCHPs) who supported HEWs by following-up on action plans at the village level.

- **Implementation**—Based on mapping data that showed an absence of any systematic system to scale up sanitation and sustain behavior change in the region, several well-tested tools were used for implementation. These included: CLTS for community mobilization; job aids (laminated pictures) and dialogue cards to help HEWs initiate simple doable actions at household levels; additional manuals and guidelines to support HEW and VCHP activities; and the *Woreda Resource Book*, sharing a twelve-step plan for multiple districts to follow the program and work toward achieving the same standards.
CLTS plus interpersonal hygiene promotion is an effective hybrid approach to address multiple, complimentary practices to improve hygiene and sanitation. While sanitation coverage increased, an independent, randomized survey of the region indicated that presence of handwashing stations (tippy-taps) proportionally kept pace with increasing number of latrines, but remained at a low level, about 16 percent. The presence of both water and soap or ash at the latrine remained low and, statistically speaking, constant. There were more latrines in the region, so more handwashing stations as well; but still at a constant and low percentage. The self reported use of any cleansing agent increased from 55 to 60 percent and that difference is statistically significant. Knowledge of when to wash hands increased significantly, particularly knowledge to wash hands after defecation; but was not yet linked to increases in actual practice (Figure 3). Effort was made to increase handwashing stations with soap/ash and water. However, one limiting factor for handwashing behavior change is lack of water. In water-scarce areas people are less interested in that behavior.

Learning (or model) woredas have a ripple effect. Learning districts have been used by zones as training sites for non-targeted districts. Districts that learned CLTS+H in this manner have shown an increase in latrine coverage equal to—or in some cases greater than—the learning districts themselves. This ripple effect contributed to an increase in sanitation coverage from 37 to 71 percent over the life of the program, as reported in the Amhara Regional Health Bureau's 2009 Annual Report. The ripple effect was so strong that it was impossible to identify an untouched control group in the region, because components of the approach had spread to most districts in the region.

Household dialogue that focus on “small doable actions” is an effective means to improve hygiene and sanitation practices. Household visits that focused on small doable actions rather than pushing one “ideal practice” lead to new behaviors. Based on a regional survey, the use of narrow-necked containers to protect water from contamination increased from 20 to 38 percent (Figure 4); and the percentage of people reporting that they treated drinking water increased from 8 to 36 percent.

Figure 2: Progress in cessation of open defecation (2008–2010)

- Baseline (n=2000)
  - Practices open defecation
  - Has access to unimproved facility
  - Has access to improved facility

- Endline (n=1378)
  - 64%
  - 46%
  - 19%
  - 17%
  - 14%

Building latrines is not enough. A focus on quality or building to minimum standards, maintenance and use are equally important. A survey of 231 households in 28 villages in East and West Amhara showed only 36 percent of available latrines were well-maintained and only 26 percent of squat hole latrines were covered.3 Moving from open defecation to fixed-point defecation achieves little health impact if the latrine is not used by all families, including children, is not maintained, or is not kept hygienically.

Handwashing behavior change is constrained by access to water and soap. The availability of a handwashing facility at strategic location in a household can be an important behavior indicator. A concurrent survey in few districts showed that while 40 percent of households had handwashing facilities, only 7 percent have water and soap for washing and cleansing purposes.

WHAT ELSE DO WE NEED TO KNOW?
LBDI followed a “learning by doing” approach. While latrine coverage and handwashing facilities increased, many challenges remain. These challenges are mostly related to meeting quality standards, maintaining and sustaining the changes.

Mobilizing communities to build latrines is a proven concept, but we need to work more to improve hygienic behaviors and practices and move people up the sanitation ladder. Ending open defecation is a noble and achievable but ambitious effort. What is critical, and still unclear, is householder behavior moving up the sanitation ladder; if a household digs an unimproved pit latrine that does not meet minimum standards, will they progressively move up to better practices, or stop at the first small doable action? The next steps are to assure the importance of minimum standards, operation and maintenance of latrines; support communities to have more permanent types of latrines than the present temporary ones; and to build a viable market for sanitation goods and services where consumers make choices and sellers respond to these demands, which results in moving households up the sanitation ladder. Over the next two years sustainable behavior change and sanitation marketing in Amhara will address these steps.

Footnote:
3 The surveys referred to in this Learning Note were conducted in “Learning by Doing” woredas/districts and reported by Regional health Bureau staff and the WSP/HiP regional advisor.
Initial messaging has been successful, and this success has been partially due to intensive household visits. Identifying emotional triggers magnify the message, reaching broader and deeper via multi-media/channel approaches. One of the gaps identified in the Amhara program was that the communication strategy developed was designed based on international knowledge and local experiences and was not based on a local elicitation of people’s knowledge, aspirations and motivators. In order to fill this gap and attain sustained behavior change a comprehensive formative research needs to be conducted to see and identify behavior approximations, motivators, barriers, and determinants of behavior change in about four nations and nationalities found in Amhara. Based on the study result message positioning and a broad communications campaign will be designed.

Promoting follow up communications and visits will lead to more sustainable results. One of the most important reasons for not having sustained behavior change in handwashing and the development of a permanent type of latrine technology was because there was no systematic follow-up and supportive supervision rendered by the districts. It has been stated by many prominent CLTS advocates and others that the key for behavior change is the follow up efforts carried out after community mobilization.

—By Kebede Faris (WSP/World Bank-AF) and Julia Rosenbaum (FHI 360 Development/ WASHplus)

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About

Today, 2.6 billion people live without access to improved sanitation. Of these, 75 percent live in rural communities. To address this challenge, WSP is working with governments and local private sectors to build capacity and strengthen performance monitoring, policy, financing, and other components needed to develop and institutionalize large scale, sustainable rural sanitation programs. With a focus on building a rigorous evidence base to support replication, WSP combines Community-Led Total Sanitation, behavior change communication, and sanitation marketing to generate sanitation demand and strengthen the supply of sanitation products and services, leading to improved health for people in rural areas. For more information, please visit www.wsp.org/scalingupsanitation

Contact us

For more information please visit www.wsp.org or email Kebede Faris at wsp@worldbank.org, or Julia Rosenbaum at jrosenba@fhi360.org.