USAID FROM THE AMERICAN PEOPLE | HIP HYGIENE IMPROVEMENT PROJECT

AT-SCALE HYGIENE AND SANITATION IN ETHIOPIA AND MADAGASCAR: EXPERIENCES AND LESSONS LEARNED

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

About the USAID Hygiene Improvement Project

Since 2004, the Academy for Educational Development, in partnership with ARD, the Manoff Group, and the IRC International Water and Sanitation Centre, has managed the USAID Hygiene Improvement Project (HIP), a sole-source IQC (contract # GHS-I-00-04-00024-00) funded by the USAID Bureau for Global Health, Office of Health, Infectious Diseases and Nutrition. Building on more than 30 years of USAID investments in clean water, sanitation, and hygiene (WASH), HIP focused on reducing diarrheal disease prevalence and improving child survival through the promotion of three key hygiene behaviors: hand washing with soap, safe feces disposal, and household safe storage and treatment of drinking water. HIP worked at scale in Madagascar and Ethiopia and provided technical support for hygiene improvement programming in Nepal, Peru, Uganda, India, Kenya, and the West Africa Water Initiative countries (Ghana, Mali, and Niger). In all of its programs, HIP supported the integration of hygiene into other program activities such as HIV/AIDS, nutrition, and schools.

The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. Government.

February 2011

USAID Hygiene Improvement Project
Academy for Educational Development
1825 Connecticut Avenue, NW
Washington, DC 20009-5721
Tel. 202-884-8000
www.hip.watsan.net

Cover photo credits:
Shahbaz Fawbush (left)
Richard Lord (upper right)
Crystal Thompson (lower right)

Acronyms

AED	Academy for Educational Development
CLTS	Community-Led Total Sanitation
CLTBCHS	Community-Led Total Behavior Change in Hygiene and Sanitation
DFID	UK's Department for International Development
FINNIDA	Finnish International Development Agency
HEP	Health Extension Program
HIF	Hygiene Improvement Framework
HIP	Hygiene Improvement Project
M&E	Monitoring & Evaluation
MOU	Memorandum of Understanding
OM	Outcome Monitoring
PAFIs	Petites Actions Faisables et Importantes
RRI	Rapid Response Initiative
TIPs	Trials of Improved Practices
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	United States Government
WSP	World Bank's Water and Sanitation Program
WSR	Whole System in a Room

Table of Contents

Background and Context **1**
Brief Overview of Scale and Behavior Change Theoretical Frameworks 1
HIP's At-Scale Approach 3

Ethiopia Case Study **6**

Madagascar Case Study **16**

Reflections on Successfully Starting at Scale **23**

Annex: Framework and Tools for At-Scale Hygiene Improvement **25**
1. Map the Context 27
2. Catalyze Partnerships and Coalitions 27
3. Strategize 31
4. Implement Consolidated Action Plan 34
5. Monitor Progress 35
6. Value and Evaluate 36

Background and Context

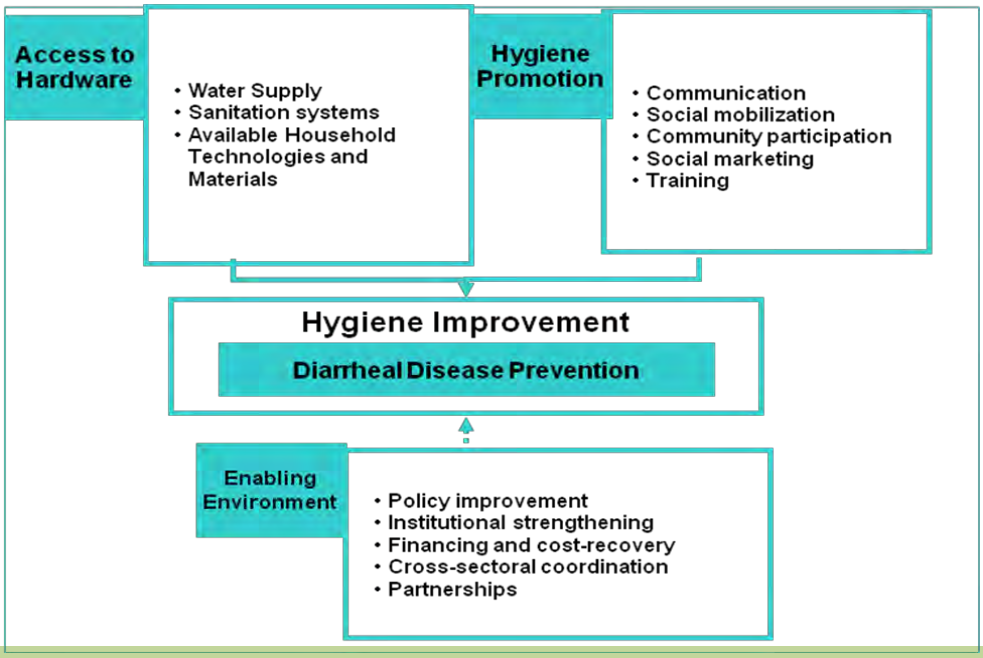
This paper reviews the Hygiene Improvement Project's (HIP) overall approach to "at-scale" hygiene and sanitation improvement, describes HIP's two at-scale applications in Ethiopia and Madagascar, and reflects on the scale experiences and their lessons for future at-scale applications. An at-scale framework and tools for potential implementers are included in the annex.

Brief Overview of Scale and Behavior Change Theoretical Frameworks

From its inception the Hygiene Improvement Project planned its program activities "at scale" rather than adopt the traditional scale-up methodology. HIP's approach to working at scale draws on systems thinking, network approaches, and behavior change theories that the Academy for Educational Development (AED) and its partners have implemented successfully in other contexts. At its core lies the **Hygiene Improvement Framework** developed by the USAID Environmental Health Project, HIP's predecessor project. HIP focused on behavior; its objective—simple and straightforward, though ambitious—was to achieve sustained practice of consistent and correct hand washing at critical times, safe disposal of feces (including children's feces), and household water treatment and safe water handling.

The Hygiene Improvement Framework (HIF) proposes that three domains catalyze and sustain hygiene and sanitation improvement: 1) access to essential hardware and supplies, 2) a supportive or "enabling environment" such as sound policy platforms and competent institutions, and 3) promotion, behavior change communication, and mobilization. The HIF reinforces the at-scale approach by asserting that interventions such as hygiene promotion or additional water sources alone are not enough—many factors must come into play to improve hygiene and sanitation. HIP used this framework to guide comprehensive programming for hygiene and sanitation improvement, recognizing that any program at scale must necessarily include these components.

Hygiene Improvement Framework



Traditional models tend to address the most pressing elements of a big problem, hoping that they will affect the whole. Implicit in such models is that other organizations will address other elements of the problem. This assumption leads to the uncoordinated piloting of strategies that will be "scaled up" if successful and/or popular. Yet the dynamics of scaling up often do not work. Many agencies independently encouraging people to wash hands correctly, for instance, do not ensure scale or sustainability or changes in social norms and institutions. Getting many partners on the same page from the beginning may be the best way to address this challenge.

Starting at scale means that a critical mass of effort needs to be simultaneously engaged in a given geographic area so that everyone in the area encounters multiple "pulls" toward an outcome—at school, at home, on the radio, at church or the mosque, in literacy classes, on roadside billboards, or while having coffee or tea with relatives and neighbors, visiting the marketplace, or selling goats. No single project can engage in all these activities simultaneously. However, if each part of the **system** voluntarily agrees to coordinate and intervene in its own way, through its own networks, toward a common goal, then this harmonized system-level at-scale approach is possible.

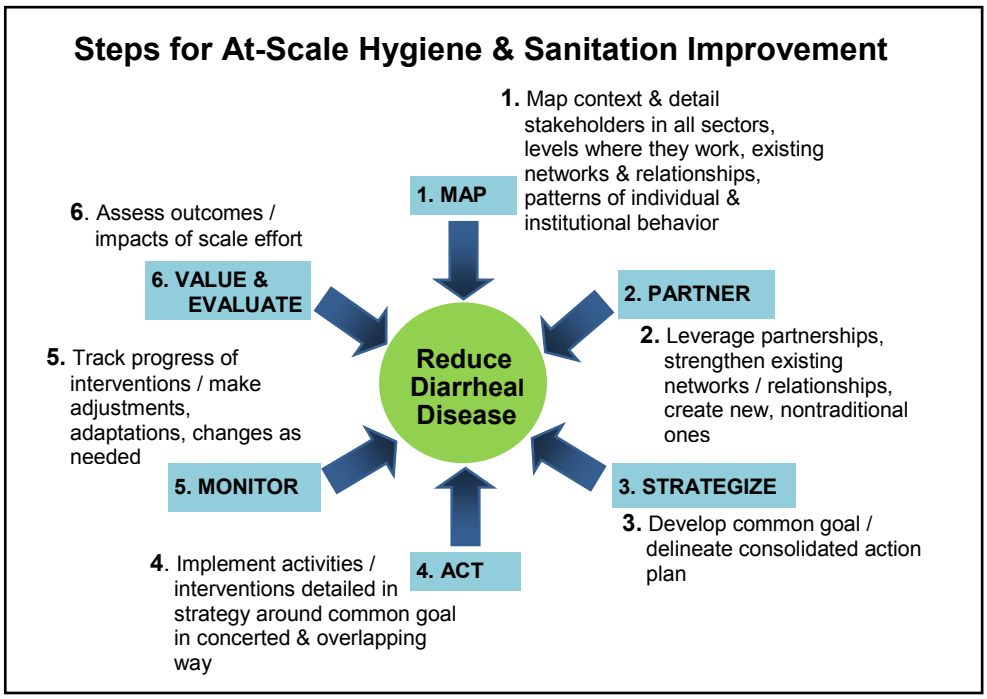
In 2004 AED developed a communications-driven management approach called SCALE™ [1] that creates social capital, strengthens governance, and increases sustainable economic growth and livelihoods for greater impact. SCALE's strength is identifying the underlying web of reciprocal relationships within systems and locating leverage points within those systems where targeted action will yield maximum change. SCALE looks at long-term patterns, trends of change, and their causes. HIP adapted the SCALE approach to focus program resources on increasing and enhancing **partnerships** based on network analysis that shows that more and stronger linkages exponentially increase reach and effectiveness. HIP encouraged **bridging** across diverse sectors and partners and **bonding** or enhanced collaboration among sectors. Using the "Whole System in a Room" (WSR) methodology developed by the Future Search Network,[2] HIP facilitated exchanges that encouraged people to examine problems in their larger context, dream of long-term outcomes, identify common ground, and then plan various actors' contributions to achieve the shared goal. A more detailed description of this process and relevant tools and references are in the annex.

The chart that follows describes the steps taken to conceptualize and implement at-scale hygiene improvement. Each function in this chart is described in more detail in the annex of this document, accompanied by relevant tools.

---

[1] For more information about AED's approach to SCALE, see "Going to SCALE," http://www.aed.org/Publications/upload/SCALE.pdf

[2] See the Future Search Network, http://www.futuresearch.net/



HIP's At-Scale Approach

Engaging —the "Multiples"

HIP defined working at scale as a large geographic reach, covering many people (at least 3 million) through many contacts so as to change both individual practices and social norms. In line with AED's SCALE approach, HIP engaged the multiples for its at-scale hygiene and sanitation effort:

1. ***Multiple Players***
    a. Health sectors, e.g., nutrition, HIV/AIDS, integrated management of childhood illness, maternal-child health, reproductive health, etc.
    b. Non-health sectors, e.g., education, road and water works, agriculture, tourism
    c. Public agencies, e.g., government agencies from all sectors, parastatal media, international bilateral and multilateral actors
    d. Private nonprofit and commercial agencies, e.g., outlets, distributors, manufacturers, media/press, religious entities, networks/umbrella organizations, and a wide range of other organizations, including indigenous, nongovernmental, faith-based, private voluntary, and community-based organizations

2. ***Multiple Behaviors***—hand washing with soap, safe feces disposal, and treatment and safe storage of household drinking water

3. ***Multiple Levels***—international, national, regional, district, community, household, individual

4. ***Multiple Interventions***
    a. Communication for awareness to motivate and improve knowledge and skills:

interpersonal communication, mass media, print, traditional (non-Western) methods such as street theater, etc.

b. Knowledge and skills training for personnel, outreach workers, individuals, etc.
c. Service provision to present opportunities to practice the promoted behaviors: demonstration latrines in public places, "sani-marts" at convenient hours and places, hand washing stations outside public or fast food restaurants and market places
d. Products to enable people to put newly learned behavior into practice: soap, water containers, water purification tablets, hand washing stations, etc.
e. Advocacy to create an enabling environment in which to practice the behaviors
f. Other: social marketing, community mobilization, etc.

Evidence-Based Planning vs. Systems-Based Program Evolution

Planning evidence-based, systematic behavior change strategies is, at least on the surface, diametrically opposed to planning systems-based scale approaches that evolve organically, depend on independent actors, and rarely use data and evidence strategically. Behavior change approaches use epidemiologic data and consumer research to identify the specific factors that most influence the performance or nonperformance of healthy behaviors like hand washing or latrine use, and build interventions to specifically address those factors. Systems approaches are far less orchestrated, leaving the particular activity design to the various stakeholders regardless of research findings. The focus is on engaging the multiples, with coordinated action toward a common goal.

In the case of HIP's work in at-scale countries, however, the inherent tension between these two schools of thought became complementary. HIP nurtured and funded specific program elements, while encouraging the coordinated action of the whole system.

HIP's scale approach incorporated widespread hygiene promotion using the principle of multiples, enhanced interpersonal communication to encourage or negotiate improved water, sanitation, and hygiene (WASH) practices, and an increasingly popular community mobilization approach called Community-Led Total Sanitation (CLTS). The Madagascar program also included partnerships with the private sector for producing and marketing latrine slabs and managing urban toilet/shower facilities, and a "WASH Everywhere" model for improving hygiene throughout a community by promoting "WASH-friendly" schools, markets, churches, taxi and bus rest stops, fast food stands, and tourist attractions. Such a comprehensive approach allows programs to address and reflect all aspects of the Hygiene Improvement Framework.

Community-Led Total Sanitation

CLTS[3] grew from an approach called Participatory Rural Appraisal, which focuses on agricultural development, natural resources management, and food security. Through CLTS, a 100 percent end to open defecation is required to see necessary improvements in household members' health. CLTS guides a community through a series of exercises, including a transect walk to identify open defecation sites, community mapping of water points and other key elements, the preparation of a feces flow diagram to follow the path of open defecation into the

[3] For more information about CLTS, see http://www.communityledtotalsanitation.org/.

drinking water, and other exercises to provoke fear, shame, and disgust that lead to a community's commitment to end open defecation.

Negotiating Improved Practices

Promoting easy-to-adopt WASH improvements, or small doable actions, combines several methodologies developed by AED and its partner, the Manoff Group. Using participatory formative research, the target audience develops a menu of feasible and effective behaviors, some of which fall short of the ideal practice but are possible given existing resources and context and that lead to some health impact. For example, an ideal practice might be using an improved latrine to manage household feces. While waiting to build or refurbish a household latrine to meet "improved" criteria, a household can bury feces in holes dug away from the house and dispose of small children's feces by burying them safely, too. The household can build or use a traditional latrine without an improved (washable) slab while it saves money, or wait for the harvest to make the necessary purchase. These are incremental, small doable actions that move households up the "behavioral ladder."

HIP developed country-specific job aids for community outreach workers, which featured small doable actions for a range of hand washing, safe water, and safe feces disposal behaviors. Outreach workers were trained to deviate from their routine of teaching, preaching, and promoting fixed practices. Instead they were encouraged to work with households and clients to first assess current WASH practices and then identify a small doable action that improves the current practice, but which may not yet be the ideal. Using visual job aids, they together explore barriers and facilitators to the improved practice, solve problems, and agree to try the improved practice. [*What would make it hard to store your water in a covered container? Do you think you could try to use this small bowl over your clay pot and dip with this long handled ladle instead? What would make it easier to keep that ladle off the floor? Could we hang it from this nail on the wall?*] The outreach worker records the goal and follows up at a scheduled time to continue problem solving and encourage increasingly more effective hygiene and sanitation practices over time.

Key Factors

From individual behavior change theories, the HIP at-scale approach identified and incorporated a combination of factors as most influential in improving WASH practices:

1. Key knowledge—when to wash hands, how to treat water
2. Improved skills—how to wash hands correctly, improve a latrine
3. Social norms—people important to you support the improved practice
4. Perception of risk—engaging in the current practice has a negative consequence
5. Self efficacy—feeling capable of performing the improved practice(s), such as small doable actions
6. Enabling technologies—access to products that facilitate the improved practice—soap or ash, containers made from local materials that facilitate hand washing with little water (tippy taps), latrines, or slabs

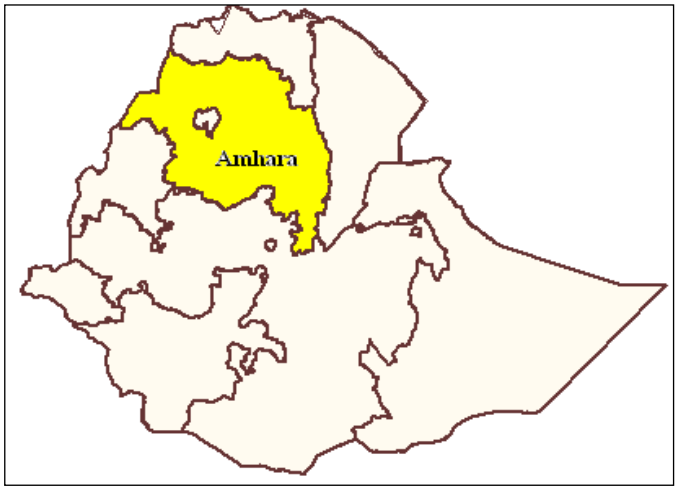
HIP supported at-scale programs in Ethiopia and Madagascar. While approaches in both countries were theoretically sound and grounded in best practice, both countries independently embraced "learning by doing" as a concept within the at-scale context. Each country program demonstrated a certain pioneer spirit and took risks by implementing this new at-scale approach. Each country program evolved according to the assets and challenges of its particular context.

Ethiopia Case Study

Learning by Doing: Program for At-Scale Hygiene and Sanitation in Amhara

Background

Ethiopia has made tremendous progress toward universal WASH access in the past decade, but significant challenges remain. WASH coverage data paint a sobering reality: nationwide only 12 percent of the population use an improved sanitation facility and only 39 percent use a safe drinking water source (WHO, UNICEF 2010). The enabling environment is strong. In late 2004 the National Hygiene and Sanitation Strategy was endorsed, and the following year the ministries of Health, Water, and Education signed an unprecedented WASH Memorandum of Understanding (MOU). Major WASH investments were made in response to a 2004 study showing that $650 million would be needed to meet Millennium Development Goals for water and sanitation, and international donors and investment banks responded with notable investments—the World Bank, the United Kingdom's Department for International Development (DFID), the African Development Bank, USAID's Millennium Development Program, and others dedicated about $260 million, which over time included a small but significant percentage of funds for hygiene and sanitation at district levels. A strong national WASH movement developed, which included government and nongovernment actors trying to reach universal access to sanitation by 2012.



The Amhara region is where WSP/HIP focused its at-scale efforts in Ethiopia.

The World Bank's Water and Sanitation Program (WSP) invited HIP in late 2005 to bring at-scale approaches to the Ministry of Health's implementation of the newly endorsed National Hygiene and Sanitation Strategy. Together, they reached agreement with the Amhara region, selected because it was a USAID and WSP priority geographic area with great WASH needs, fewer donor investments than other regions, and committed regional leadership. The regional leadership had a bold, pioneering spirit and was committed to the risk and challenge of at-scale hygiene improvement.

Program Scale Strategies

The Amhara region is divided into 11 zones with 152 *woredas* (districts) and a population of 20 million. The at-scale process aimed to reach all woredas through a phased approach: four woredas received high-intensity training and intensive expatriate and local technical assistance; and an additional seven woredas received access to tools and technical assistance delivered by regional health specialists, who themselves were supported by a regional WSP/HIP advisor. Each of the 11 woredas was located in a unique zone and served as the zone's model WASH program. A total of 30 woredas received a special stream of limited WASH funding and assistance through the World Bank/DFID Rural Water and Sanitation Project. Another 60 districts received some level of technical assistance and WASH funding from another development partner (Carter Center, UNICEF, Finnish International Development Agency [FINNIDA]). Thus over 100 of the approximately 150 woredas received some special attention and/or funding.

Strategic Components of Amhara Behavior Change Strategy

1. Undertaking multi-level advocacy (region, zone, woreda, kebele, gott)
2. Strengthening household outreach
3. Igniting community-based approaches to change
4. Providing media and communication support
5. Increasing availability and affordability of hygiene and sanitation products through private sector initiatives
6. Promoting school hygiene and sanitation
7. Establishing demonstration latrines, hand washing stations, and other hygiene-related products
8. Decentralizing planning to community level

The Whole System and a Sustainable Common Action Agenda

In October 2006 more than 100 key stakeholders joined together and committed to reach the ambitious national goal of 100 percent sanitized communities by 2012. The Amhara Regional Health Bureau, with strong support from HIP and WSP, hosted a Whole System in the Room meeting that brought together 19 different stakeholder groups—the whole system—to develop and commit to a common action agenda to reach the goal of "At-Scale Hygiene and Sanitation Improvement in Amhara." Stakeholders included leaders from the regional bureaus of health, education, water resources, and agriculture, and representatives from NGOs, the religious community, private sector, and the media. A strong outpouring of commitment was possible because of the tremendous effort at the federal and regional level leading up to the meeting, and the zealous leadership of the Amhara Regional Health Bureau.

> The Bureau of Health of Amhara Regional State, in collaboration with the Water and Sanitation Program-Africa and the USAID Hygiene Improvement Project, has embarked on a brand new approach to address the appalling hygiene and sanitation situation of the 20 million plus inhabitants of the Amhara Region. This at-scale implementation of hygiene and sanitation strategy will be achieved through an approach called *Learning by Doing*…. I call upon you, the intrepid leadership of Amhara Region, and praise you in coming together to seize this tremendous opportunity we have to coordinate our actions and change the face of our great region together, forever.
>
> *-Asrat Genet Amnie, MD, Head, Bureau of Health, Amhara National Regional State*

Learning by Doing
The at-scale process pioneered by the Amhara region represented a new approach to at-scale hygiene and sanitation improvement that was called "Learning by Doing." Through the Whole System in the Room meeting, the wide range of stakeholders developed a common action agenda and coordinated plan. The WSR meeting and vocal commitment of stakeholders was a public expression of "engaging the multiples" around the common goal to end open defecation for health, wealth, and development. From the common action agenda, HIP worked with WSP and regional Health and Education Bureau counterparts to develop a detailed behavior change strategy (see box, above) that described a range of approaches and tactics planned to achieve the agenda. Once the detailed behavior change strategy for universal hygiene and sanitation was finalized, training, planning, and implementation continued at the woreda and kebele levels. The practice of key hygiene and sanitation behaviors was tracked and monitored at the local and regional levels and activities adjusted as needed.

A strength of Amhara's approach was that it took advantage of existing water programs financed by the World Bank, DFID, African Development Bank, UNICEF, FINNIDA, and other partners to leverage local financing for hygiene and sanitation activities. District officials developed hygiene and sanitation plans and budgets to accompany new water systems in their districts. HIP and WSP worked with the Amhara Regional Health Bureau to develop a resource book that described and facilitated a 12-step process to achieve total behavior change, providing tools, examples, sample budgets, and even electronic templates for creating and managing hygiene and sanitation budgets.

Multiple Levels and Sectors
Mobilizing the whole system did not stop at the regional level. Districts organized WSR stakeholder meetings to rally stakeholders and development partners in each woreda. While the overall approach nurtured the participation of the whole system, including schools, religious institutions, and the private sector, changing centuries-old practices required intensive activity at the household and community levels. Ethiopia's Health Extension Program (HEP) served as the backbone of outreach efforts into households and communities. WSP/HIP worked through the regional HEP to enhance the capacity of health extension workers assigned in the Amhara region to use CLTS techniques to "ignite" their communities to end open defecation, and then to negotiate improved hygiene and sanitation practices—a process the health extension workers themselves named *mikikir*. More than 5.8 million people in the region have been reached by hygiene and sanitation promotion activities. An estimated 4 million people stopped practicing open defecation and started using a pit latrine in addition to improving other hygiene practices such as washing hands with soap and treating and safely storing drinking water.

Photo: Jay Graham/USAID

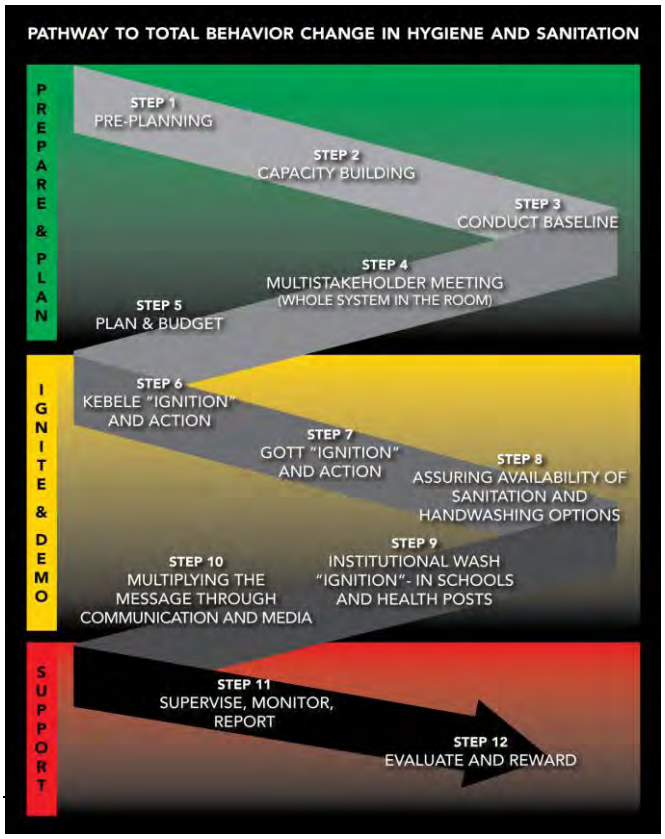
These farmers were trained in latrine promotion and construction.

The acronym "WSR" is well integrated into the Amharic discourse of opinion leaders and regional and district administrators when they describe their process for achieving universal hygiene

and sanitation by 2012. Though few could specify what the acronym stands for, in the Amhara region, WSR signifies a commitment to community-led total hygiene and sanitation, indicating institutional change in planning that now includes a range of stakeholders.

Community-Led Total Behavior Change in Hygiene and Sanitation (CLTBCHS) Activities
The hybrid methodology combined and systematized the best approaches into a regional process carried out at local (district, sub-district/township [*kebele],* and village [*gott*]) levels. Rather than promote a single, ideal practice, health extension workers partnered with family members to assess current WASH practices, and then chose one or two practices—small doable actions—the family members thought they could do consistently. This approach built on the sanitation ladder concept, which starts with the unacceptable practice of open defecation and moves people toward the ideal of an improved pit latrine or even a modern pour flush option. Likewise, options were offered for household water treatment—improving a cover for an existing container, making a ladle and hanging it off the floor to avoid contamination, etc.— and hand washing—making a tippy tap, placing hand-washing stations at key locations, washing hands with ash, etc.

As mentioned earlier, even this scale approach was implemented in phases: some communities received high-intensity assistance; others received some technical assistance and funding; and most received funding only. Part of the scale strategy was to offer training and tools to other development partners that could train their trainers to then train outreach workers in their coverage districts. High-intensity areas served as models that were supposed to motivate neighboring woredas to excel and do as well in achieving sanitation performance goals. Success was loudly celebrated, and focused technical assistance helped to not only "spread the word" but spread the improved practices.



The scale approach used is documented in the *Woreda Resource Book for Community-Led Total Behavior Change in Hygiene and Sanitation,*[4] and practical training manuals have been developed for use in Amhara that can be adapted and replicated in other regions of Ethiopia. The following table and graphic (at left) from the Resource Book outlines the 12 doable and achievable steps developed to guide woredas to promote CLTBCHS in their communities and institutions.

[4] "Woreda Resource Book for Community-Led Total Behavior Change in Hygiene and Sanitation," Amhara Regional Health Bureau, WSP, HIP, October 2008. http://www.hip.watsan.net/page/2876

Woreda Resource Book
12 Steps for Total Behavior Change in Hygiene and Sanitation

Section 1: Preparation and Planning Phase

1. Preplanning—do a rapid assessment of the existing hygiene and sanitation situation; conduct a preplanning advocacy meeting to mobilize support, prepare for next steps, and access seed money to cover preparation costs.
2. Capacity building—prepare for and conduct training on how to facilitate behavior change in hygiene and sanitation as well as collect and analyze data.
3. Conduct baseline data collection and analysis (in all kebeles and institutions) to build a hygiene profile of the woreda and develop a strategic plan.
4. Conduct a Whole System in the Room for key woreda stakeholders to strengthen networks and partnerships and build consensus on the way forward.
5. Develop an action plan for facilitating behavior change with a (expanded) budget to support multiple "ignitions" and hardware (products and services) in order to receive funding.

Section 2: Ignition and Demo Phase

6. Select Kebele Ignition Team and conduct orientation on the ignition process and its steps.
7. Plan for and conduct ignition for all gott residents to assess the situation, find solutions, and advocate for change in their community to end open defecation and improve hygiene practices.
8. Establish appropriate technology options for households and institutions—a supply of affordable and practical hand washing and sanitation options.
9. Support institutional WASH ignition, with the focus on schools and health centers.
10. Multiply the message through a mix of communication channels—village meetings; house-to-house, school, and church visits; and radio and other mass media.

Section 3: Support, Monitoring and Evaluation Phase

11. Plan and carry out supportive supervision/follow up, monitoring, and reporting for frontline facilitators.
12. Carry out regular program performance monitoring and evaluation and reward good performance.

These 12 steps in the pathway all reflect key elements laid out in the Ethiopia National Hygiene and Sanitation Strategy, the Health Extension Worker Handbook,[5] and the Amhara Regional Behavior Change Strategy.[6]

WASH in Schools

An essential at-scale element is connecting and integrating with other sectors to broaden dissemination of messages and program coverage. In this regard WASH and schools are a natural fit. WASH in schools was prioritized from the start in Ethiopia, named as a critical part of the common action agenda at the Whole System in the Room meeting. While planned from

---

[5] "Health Extension Worker Handbook: Community-Led Total Behavior Change in Hygiene and Sanitation," Amhara National Regional State Health Bureau, WSP, HIP. January 2009. http://www.hip.watsan.net/page/3214

[6] "Amhara Regional Behavior Change Strategy." http://www.hip.watsan.net/page/5304

the start, and included as a step in the Woreda Resource Guide, this component took time to emerge. The tools were only finished as the CLTBCHS program entered its final year, at which point the Regional Education Bureau added new energy and commitment into making WASH-friendly schools a key component, with targeted stakeholder meetings, trainings, and technical support. With WSP and others, HIP developed a "Resource Book for WASH-Friendly Schools" and a training manual for teachers, parents, and student leaders. Supplemental materials include a picture and reading book and additional reading materials for teachers to use to develop classroom sessions. HIP's experiences linking with the education sector in both at-scale countries have provided lessons, manuals, materials, and models that HIP is sharing with partners in multiple sectors.

Monitoring and Evaluation Approaches

WSP/HIP guided a process to develop a multi-level monitoring and evaluation (M&E) framework to assess the outputs and impact of Ethiopia's at-scale WASH approach. This framework included indicators to assess change at multiple levels—institutional, community/school, and household (see box, right). The framework contemplated measuring changes in partnerships, bridging across sectors, and bonding within sectors, all working toward a shared action agenda. A robust set of indicators was developed but never fully measured because of resource constraints, but some important headway was made in developing a methodology to measure this at-scale innovation.

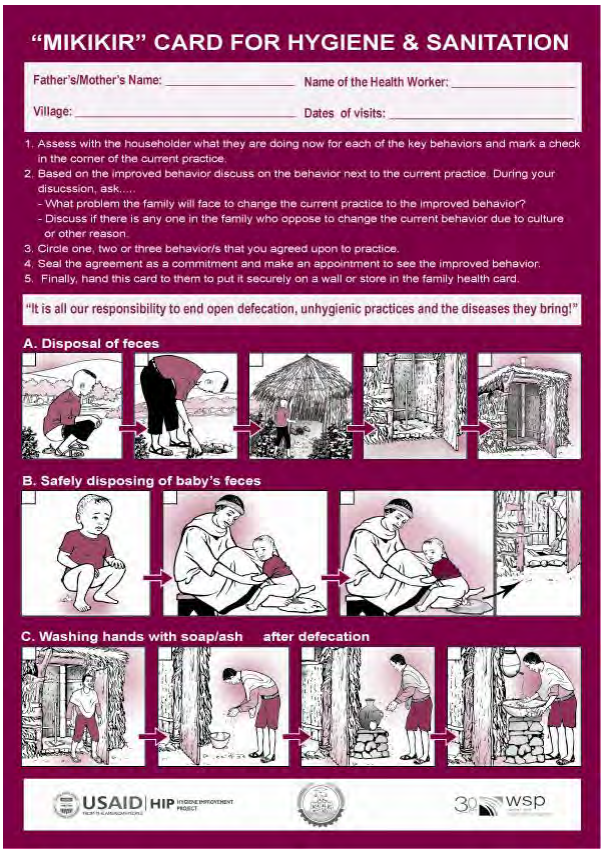
Selected Indicators from M&E Framework

- # of targeted woredas implementing integrated hygiene promotion actions to complement hardware investments
- % of annual budget spent on WASH by targeted woredas
- # of institutional partners showing increased collaboration by new and strengthened linkages with other organizations
- % of trained teachers using newly introduced hygiene materials
- % of targeted schools with hand washing stations
- % of households using improved sanitation facilities meeting minimum standards by woreda

In the four high-intensity woredas:

- 328 health extension workers, development agents, and district water team members participated in a two-week CLTBCHS training
- 676 took part in WSR meetings in the four districts
- 276 received a booster training in CLTBCHS
- About 500 parents, teachers, youth leaders, and school administrators took part in WASH-friendly-schools training and booster training

Regional monitoring figures report that a total of 47 woredas were ignited for total behavior change in hygiene and sanitation. Just under half conducted a WSR stakeholder meeting. All rallied stakeholders and systematically trained health and other outreach workers. Monitoring estimates report 1,880 health extension workers received training in the various skills of community-led total behavior change, including CLTS ignition tools, household-level interpersonal communication using the mikikir technique of negotiating improved practices, and WASH monitoring. Just over 1,500 other frontline workers, mostly a government-supported cadre of farmers, were rallied, given basic training on latrine building, and encouraged to build their own latrines and serve as role models in their villages to end open defecation.



The mikikir job aid (shown here in English) was provided to health workers in Amharic to negotiate improvements in household hygiene practices.

A total of 320,000 mikikir job aids were printed and distributed (300,000 of these financed by the Regional Health Bureau through other funding). Another 20,000 copies each of three additional job aids were developed, printed, and distributed to health extension and other outreach workers—*When and How to Wash Hands*, *How to Build a Tippy Tap*, and *How to Build a Latrine* (see http://www.hip.watsan.net/page/3524).

Data collected in 2008 and 2009 in the four high-involvement districts indicate impressive findings in latrine coverage ranging from increases of 22 percent to 57 percent between the two years. A more recent monitoring report showed that in the four learning districts where WSP/HIP focused efforts, overall latrine coverage and reported use averaged 71 percent, with some districts reporting levels above 90 percent.

However, an assessment unrelated to the evaluation but conducted by WSP/HIP and the Amhara Health Bureau indicated that only about 30 percent of the latrines met what would be considered minimum standards in terms of distance from the house or water source or presence of a covered pit, a washable platform, or a superstructure that provides privacy.

Results

Sanitation coverage was also tracked through the selection of a random sample in high-intensity and low-intensity woredas in 2008 (baseline) and 2010 (endline); a specialized social research firm collected data. HIP developed indicators to generate information from a range of stakeholders including households, schools, and woredas about the practice and importance of hygiene behaviors, access to hygiene facilities such as latrines and hand washing stations, and exposure to hygiene

Photo: Patricia Mantey, AED

A significant number of latrines in the Amhara region are considered unimproved.

promotion information.[7] The 2010 research included a comparison group. Initial comparative findings from the June 2010 endline indicate that the Learning by Doing Program for At-Scale Hygiene and Sanitation is having an impact in the region. Significant changes were seen in the access to sanitation facilities from baseline to endline.

Figure 1: Changes in Defecation Practices and Latrine Usage

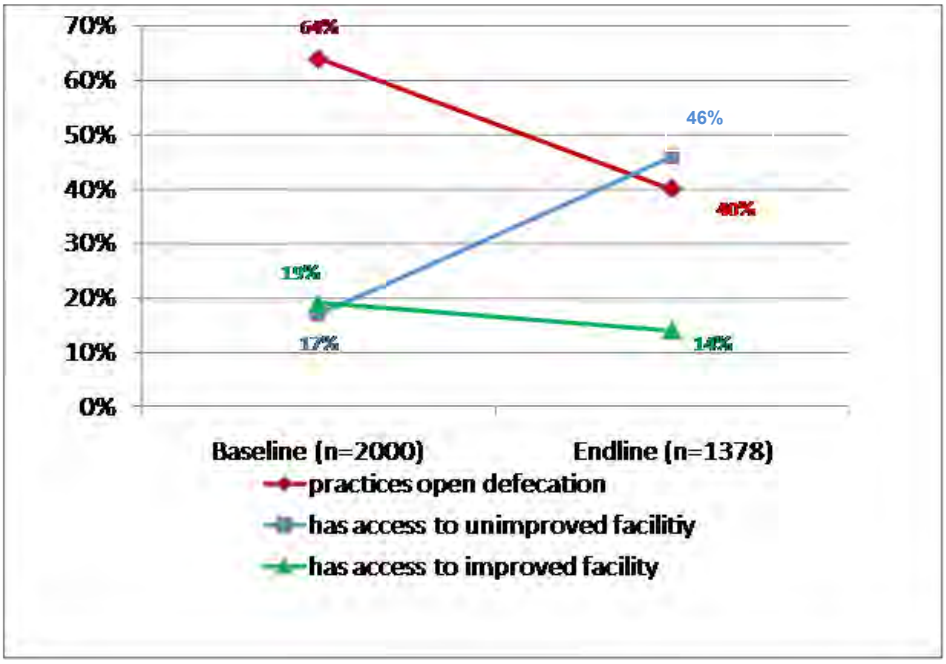


Figure 1 above presents findings related to sanitation coverage. These findings indicate a drop of 24 points in the practice of open defecation between the baseline and the endline; a 29 percent increase in the adoption of unimproved sanitation; and a 5 percent drop in access to improved sanitation. Comparisons across measures are statistically significant (Chi2=332.7, p=.00). Changes in the expected direction are rare in a program that has been underway for only two years.

A logistic regression model using only endline data was constructed to identify the predictors of sanitation uptake. It included different types of variables grouped into the following categories: household characteristics; intervention characteristics; perceptions about latrine ownership considered to be spin offs of sanitation promotion efforts given the activities implemented or the slogan used by the intervention; and beliefs about latrine possession defined following a theoretical model based on the Theory of Reasoned Action (Fishbein and Ajzen 1975).[8] The following presents the findings of this analysis. It includes only the statistically significant predictors detected. Findings in this table show that two of the proxy measures included in the model are significant predictors of sanitation uptake: the participation of the community where

[7] For additional information on the indicators used, see "Baseline Household Survey, Institutional Performance and School Assessment Conducted in 22 Woredas of the Amhara National Regional State," Amhara Regional Health Bureau, WSP, HIP, December 2008. http://www.hip.watsan.net/page/3193; and "Baseline and Endline Comparisons: Institutional, Household, and School Surveys," 2011. http://www.hip.watsan.net/page/5305

[8] Fishbein, M. and Ajzen. I. 1975. Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research. Reading, Mass.: Addison-Wesley.

the respondents reside in a "walk of shame," which is a proxy for CLTS, and the household visit of health education workers to discuss sanitation improvement. The table also indicates that the perception that the ownership of a latrine contributes to the community's health as well as to the community's development also predict sanitation uptake. The first perception is associated with CLTS activities and the second one with the slogan used to promote sanitation and hygiene by the Learning by Doing Initiative. A final predictor of sanitation uptake is the perception that latrine ownership makes the owner popular. This perception may also be a spin-off of CLTS since that component of the program promotes compliance with a community designed plan to stop open defecation, which may end up making latrine owners popular. The data presented in this table suggest that when all the predictors are present, households are 11.67 times more likely to have adopted a latrine than when they are not.

Predictors of Sanitation Uptake at Endline

Dimensions	Factors	Significance	Beta	Odds Ratio
Household Characteristics	House is part of a compound	.03	.97	2.65
Intervention Characteristics	Community participated in walk of shame	.00	.81	2.23
	Household visited by health worker to improve sanitation	.05	.56	1.75
Intervention Spin-Off Perceptions	Having a latrine contributes to the community's health	.00	.94	2.6
	Having a latrine contributes to the community's development	.00	.61	1.8
Beliefs About Latrine Possession	Having a latrine makes owners popular	.00	.45	.64

Products and Tools

Throughout this process, WSP/HIP developed products and tools to implement at-scale hygiene improvement. These ranged from baseline surveys to training guides, resource books, and practical tools such as the mikikir card to help outreach workers negotiate household behavior change (see box below).

At-Scale WASH Products and Tools—Ethiopia

- Whole System in the Room—Planning Book, 2006 Meeting Report and Video
- Regional Behavior Change Strategy
- District Resource Book and Facilitator's Guide for Training for Community-Led Total Behavior Change in Hygiene and Sanitation
- Health Extension Worker Handbook
- Health Extension Worker Job Aids—mikikir assessment card; how to cards on making tippy taps, washing hands, and building improved latrines
- Facilitator's Guide for Training Parents, Teachers, and Student Leaders in WASH-Friendly Schools and Resource Book
- Monitoring and Evaluation Framework
- Baseline and Endline Survey Reports

These products and tools are available on the HIP website at: http://www.hip.watsan.net/page/2489.

Ethiopia-Specific Components of Success

Numerous lessons common across HIP's two at-scale country programs are described later in the document. The Amhara experience, however, also offers key specific elements of success from Ethiopia's context. Amhara's integrated at-scale approach occurred within a favorable environment: a national hygiene and sanitation strategy that facilitated multisectoral collaboration through a memorandum of understanding signed by three ministries (health, water, and education), an active national WASH movement, and a regional entity to champion the effort. These elements plus the strong national policy and donor context were critical to launching the Amhara at-scale experience.

HIP's partnership with WSP was critical from several angles. The WSP partnership provided the necessary financial support for on-the-ground implementation in the four high-intensity learning districts and beyond and complemented USAID's core funds to support the at-scale effort. Beyond this implementation support, the Government of Ethiopia/World Bank Rural Water and Sanitation Program encompassed a larger context that included water loans, and thus provided financial incentives for communities to participate within a larger framework.

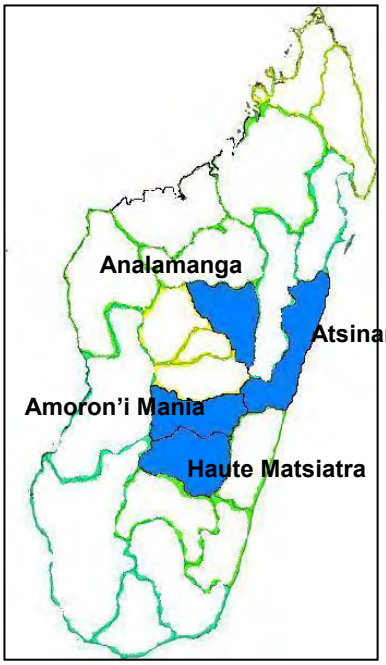
A number of elements were key to the progress made during the Ethiopia scale experience:

- The at-scale initiative was embedded within the Ethiopian National Maternal and Child Health Program, or Health Extension Program, which was critical to scale and sustainability. Health extension workers reach into every rural village and have already focused on environmental health within their child survival mandate. The Health Extension Program itself was a bold new initiative to reach the rural poor; the challenge of the at-scale WASH program fed into its self image and the image within ministries and from the outside as well. What HIP and WSP offered was a specific behavior-focused approach and concrete tactics and tools for hygiene and sanitation improvement.
- The at-scale approach strengthens coordination within sectors and creates vital bridges across sectors. To increase the effectiveness of HEW promotion efforts and increase the likelihood of households adapting the three key hygiene behaviors, all stakeholders must increasingly work together in a coordinated and harmonized manner.
- The Amhara at-scale initiative had a regional champion who made it his personal mission to achieve universal behavior change.
- In addition to this enthusiasm and support, structures were created and enforced, which helped to get results, such as including improved hygiene and sanitation performance indicators for regional, zonal, woreda, and kebele government employees and politicians in the government's results-based performance system. The activities were taken seriously and government officials acted. Zonal health staff working with the woreda health office facilitated the involvement and full commitment of political leaders, the woreda desks (water, environmental health, education, agriculture, and rural development), and others.
- Publicizing and sharing success is an effective tactic for increasing scale. Change spreads; healthy competition spurs new gains in hygiene and sanitation. WASH-friendly schools and certified open defecation-free communities can inspire change in neighboring schools and adjacent communities, multiplying impact and reaching closer to the goal of universal hygiene and sanitation.

Madagascar Case Study

Background

Madagascar was an excellent candidate for at-scale programming because USAID had supported water and sanitation programming since 2002 through the Diorano-WASH platform—a consortium of government and nongovernment organizations working together to achieve WASH goals. In addition, the government's five-year Madagascar Action Plan committed to ambitious goals in water, sanitation, and hygiene improvement using the Diorano-WASH platform.



HIP worked in four regions in Madagascar.

Into this favorable environment, HIP joined the Diorano-WASH consortium, which at the time had about 20 active members with limited collaborative activities. HIP catalyzed the group into action through a Whole System in the Room event in 2005 that included 185 stakeholders from national, regional, and local government; donors including USAID; international, national, and local NGOs; the private sector; training and research organizations; journalists, artists, and "observers." The event propelled WASH into the five-year Madagascar Action Plan, ignited the entire WASH platform, and engaged many new partners. The WSR spurred the national WASH campaign; HIP organized the campaign's official launch, which was presided over by the minister of health.

HIP's at-scale program in Madagascar focused on four USAID priority geographic regions: Analamanga, Amoron'i Mania, Haute Matsiatra, and Atsinanana, with an estimated population of 6,420,000. Following the WSR, HIP selected priority communes in each region based on diarrheal disease prevalence, access to water, sanitary latrine coverage, and the presence of development partners.

The illegal takeover of the Madagascar government through a coup d'état in early 2009 led to a U.S. Government (USG) suspension of any direct support to the de facto government of Madagascar. Since HIP worked very closely with the government on many program activities, the USG directive required HIP to sharply change course. Therefore, HIP's approach differed pre- and post-coup. This difficult program challenge, however, allowed HIP to experiment with new partners and hygiene/sanitation approaches, showing the advantages of at-scale program flexibility.

Program Scale Strategies

Sustainability

From the beginning, HIP aimed at sustainability by seeking to embed hygiene promotion in national policy and programs within primary technical ministries, but also by branching out to explore more possibilities, such as including hygiene in the training program of the Institut National de Santé Publique et Communautaire/Faculté de Médecine and in the curricula of midwife, nursing, and social work schools and teacher training institutes. HIP first began

working in partnership with the Ministry of Mines and Energy to coordinate the at-scale approach. Then the Ministry of Health undertook a national hygiene campaign mandated by the Madagascar Action Plan, involving sector partners such as WaterAid, UNICEF, and local NGOs. HIP staff was housed in the regional administrative offices, allowing HIP to help each region organize and catalyze its WASH committees, a multi-agency structure that was replicated down to the lowest administrative level, the *fokontany*. HIP and WASH partners engaged in national level advocacy that resulted in adopting the "WASH-friendly" approach for schools and health centers, and in the development and adoption of a National Sanitation Strategy. HIP's original intent was to work through the government, but HIP also forged partnerships with the Malagasy Red Cross, the Scout Federation of Madagascar, Club Vintsy (an active, nationwide youth environment club), and a range of community- and faith-based organizations.

Principle of Multiples

HIP anchored its at-scale approach in the principle of multiples (multiple players, behaviors, interventions). This created an attitude of openness to opportunities for partnering and for applying "Learning by Doing" modeled on HIP's experience in Ethiopia. As HIP's mandate was limited to promoting the three key improved hygiene practices (household water treatment and storage, hand washing with soap, and improved sanitation), the program sought partners engaged in WASH hardware provision to achieve impact, as suggested by the Hygiene Improvement Framework. Eventually, HIP funding from the USAID Mission allowed the program to engage in simple community and health facility/school WASH infrastructure rehabilitation.

Negotiating Small Doable Actions (PAFIs)

Initially, Diorano-WASH used formative research by HIP partner the Manoff Group on barriers and motivating factors to shape its behavior-change approach. In 2006 HIP conducted Trials of Improved Practices (TIPs) to identify small doable actions for hygiene improvement adapted to rural Madagascar. The TIPs methodology gives program planners an in-depth understanding of families' preferences and capabilities as well as the obstacles they face in improving their health and their motivations for trying new behaviors and practices.[9] The small doable actions, widely known in Madagascar as "PAFIs" (*petites actions faisables et importantes*), were joined by *méthodes alternatives,* alternative methods to accomplish the same goal. For example, boiling water and solar disinfection are méthodes alternatives for treating drinking water, whereas covering a water storage container with a hard cover is a PAFI—a small doable action to store water safely. The PAFIs and méthodes alternatives became the basis for hygiene promotion materials and messages and have been adopted by many organizations across Madagascar.

WASH Everywhere

Another at-scale strategy evolved from the initial work with the ministries of Health and Education to create WASH-friendly health centers and schools. The "WASH-friendly" label applies to institutions with minimum acceptable WASH facilities and services, such as improved latrines segregated by gender, places to wash hands with soap at critical times, correctly stored and treated drinking water for clients or pupils, and instruction/demonstrations for clients and students to practice improved hygiene. Over time this WASH-friendly model was adapted to different places, such as churches, tourism attractions, transportation hubs/taxi stations, highway

[9] For additional information on the TIPs methodology, see http://www.manoffgroup.com/resources/summarytips.pdf.

rest stops, and markets. Ultimately, HIP promoted the WASH-friendly commune (medium-sized administrative unit) where all institutions and facilities agreed to meet minimum hygiene standards, or "WASH Everywhere."

Program Activities

2006 to Early 2009

After the WSR and the national campaign launch, HIP trained staff from seven local NGOs to promote improved hygiene practices through their facilities and community channels. Each NGO created a distinct program for hygiene promotion—in schools, through Madagascar's Champion Community effort, and through local radio. HIP identified community extension worker networks through various ministries and NGOs and trained them in PAFIs, méthodes alternatives, and promotion techniques. HIP also worked with the government and Diorano-WASH to create WASH-friendly schools and health centers. These community structures were considered venues that would help influence household hygiene practices.

As HIP's overall program solidified, each region initiated particular hygiene promotion strategies adapted to regional opportunities. For example, in Fianarantsoa in the Haute Matsiatra region, HIP organized a high-visibility WASH promotion effort through the all-Madagascar youth sporting competition, organizing youth into latrine cleaning and repair brigades. In coastal Tamatave in the Atsinanana region, HIP organized hygiene promotion efforts via television spots and festival floats linked to the litchi harvest, a time when high hygiene/sanitation standards are required to meet export standards for fruit. In Ambositra in the Amoron'i Mania region, HIP seized on a government-sponsored program called RRI (Rapid Results Initiative) that challenged each region to identify a theme and very ambitious goals for rapid results in three months (e.g., tax collection, family planning). The region targeted household latrine construction through the RRI Latrines program, which provided a springboard for post-coup work in community sanitation. In the Analamanga region around the capital city, hygiene promoters in faith-based groups, such as Sunday schools and women's church auxiliaries, launched a series of WASH training programs for group leaders.

Photo: Shahbaz Fawbush

A newly built household latrine features a tippy tap for hand washing.

Always looking for opportunities to link WASH hardware with software (hygiene promotion), HIP identified national hardware partners in *Fonds d'Investissement pour le Développement*, a World Bank-funded community development program providing water and sanitation, and trained its community workers to include hygiene promotion in their community water supply activities.

When the USAID Mission in Madagascar added water earmark funding to supplement the project's funding, HIP addressed the need to improve access to enabling technologies demanded by people exposed to hygiene promotion messages. Specifically, HIP designed and conducted needs assessments in schools and health centers to identify opportunities for simple

repairs and rehabilitation of existing water/sanitation facilities. The assessments were completed; however, activities were halted due to the 2009 coup.

Also prior to the coup, in response to USAID's request to seek innovative ways to improve access to WASH products and facilities, HIP mapped out a strategy for developing sanitation business models. Two models had potential for success in the Madagascar context: 1) privately owned public pay-for-service toilet/shower/laundry facilities appropriate for urban areas, and 2) sanitation/hygiene stores or product lines for hardware stores financed through specially designed bank loans. HIP commissioned consumer preference and ability-to-pay surveys that informed the business plans for the two models. Though the coup delayed this component, the ideas were adapted for public-private sanitation partnerships after new program directions were established.

Photo: Shahbaz Fawbush

A SanPlat vendor and some of her masons display products for improved latrines.

UNICEF trained local HIP staff and its other WASH partners in CLTS methodology to end open defecation, and the Amoron'i Mania region piloted the approach to complement the energetic RRI Latrines program. This approach to end open defecation without subsidies and outside assistance was integrated into other regions' efforts. HIP adapted the hybrid approach from Ethiopia, which links CLTS to improved hygiene practices. Additionally, HIP/Madagascar supported the sale and purchase of improved latrine slabs from trained masons and local hardware stores in three regions.

Reoriented Activities 2009–2010

After the coup, HIP evolved into a community, private-sector, and NGO-based program with sanitation marketing and CLTS comprising core activities. Scouts, Club Vintsy youth clubs, the Malagasy Red Cross, and members of faith-based community groups were channels for hygiene promotion.

The sanitation marketing component yielded three promising models:

1. ***Public-private partnerships for urban neighborhood toilet/shower facilities.*** HIP supported renovation of dilapidated public toilets *(blocs sanitaires)* then facilitated a partnership between the commune and a privately contracted facility manager, often a reputable NGO. The manager maintains the facility, collects user fees, and pays both his/her own salary and a monthly contribution to the commune. The commune sets up a revolving fund with the monthly contribution to refurbish additional facilities. This approach has become an integral part of the WASH-friendly market/taxi hub model. Demand for accessible, clean facilities is very high, with one facility averaging up to 12,000 visitors per month, and the potential for generating income is also high.

2. ***Sanitation products points of sale.*** HIP worked with small-scale concrete-production workshops to produce the improved SanPlat latrine slab for retail sale at low cost in hardware stores. Currently, 48 sales points operate; demand and sales are high in the small towns surrounding the capital city without any additional promotion. In more rural areas or remote towns where people are poorer, sales are slower. Latrine slabs are marketed with soap and Sur'Eau chlorine water treatment solution, but all three are rarely sold as a package. Through HIP support, vendors provide brochures to SanPlat customers that explain how to build improved latrines.

3. ***Training local masons to make and sell SanPlat slabs and build household latrines.*** The third model is linked with CLTS and evolved from the RRI Latrines program. HIP trained local masons to make concrete SanPlat slabs and build latrines that meet safety and environmental standards and provided starter kits of a slab mold. These masons were encouraged to start a business, work for the commune to meet the demand for household latrines generated by RRI or CLTS, or join small NGOs that build household latrines.

Photo: Shahbaz Fawbush

Hygiene promotion literature and water treatment products are on display at a church latrine.

HIP developed a program and guidebooks for the Scout Federation of Madagascar for earning a WASH badge. Scouts actively participate in many WASH and HIP activities such as international day celebrations (World Water Day, Global Handwashing Day, etc.). They also organize weekend "camps" with community and household WASH outreach activities.

HIP staff also created a WASH-friendly church program where adequate sanitation and safe water are available for parishioners and where WASH messages are presented during Sunday school for adults and children.

Monitoring and Evaluation Approaches

HIP participated in USAID/Madagascar's annual outcome monitoring (OM) exercise for all health sector projects, which collects information at the household level, and developed process and outcome indicators for WASH activities. The Government of Madagascar adopted WASH indicators and incorporated them into the national monitoring and evaluation system; all other WASH efforts in the country are expected to use these access and behavioral indicators for the three key practices to measure their programs.

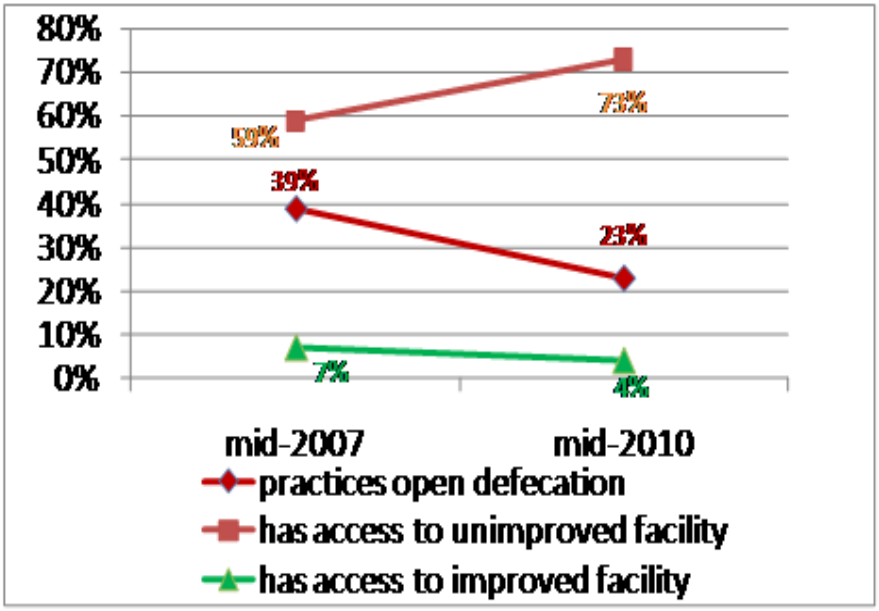
HIP conducted four outcome monitoring measures to collect household data starting in 2007 and ending in 2010. HIP considers the 2007 and the 2010 measures as the baseline and the endline,

respectively. The OM exercise used Lot Quality Assurance Sampling for random household selection. HIP also surveyed schools and health facilities in 2007 and 2008 when the WASH-friendly schools/health centers effort was in full swing; however, these institutions have not been followed since the programs were dropped in early 2009.

Key Results

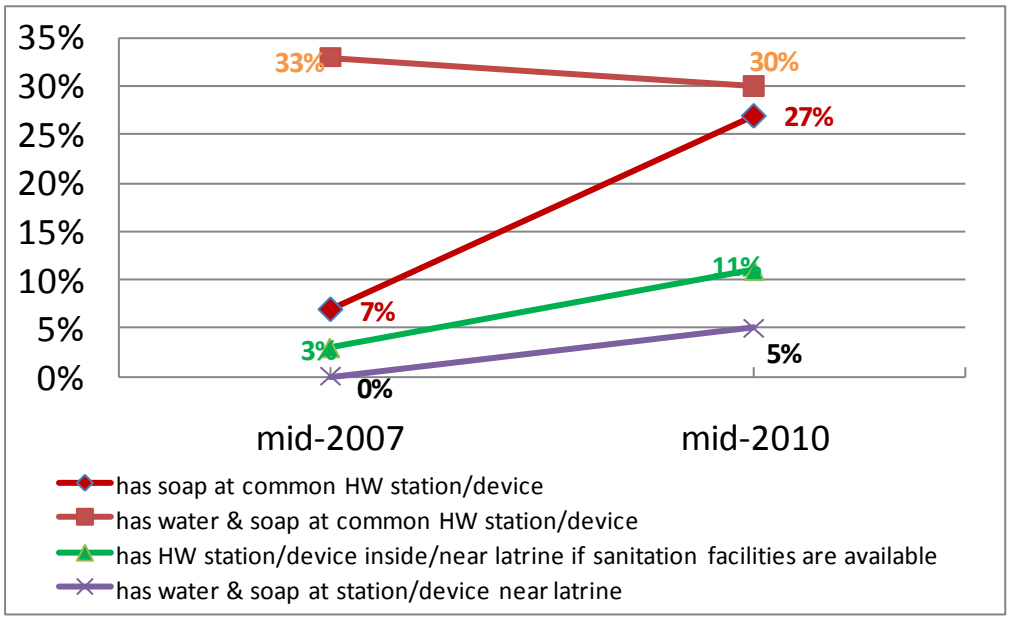
The annual household surveys allowed for comparisons on key indicators from the 2007 baseline onwards. Initial results for the 2010 endline survey show success as seen in the charts below. The first chart on sanitation uptake shows the practice of open defecation dropping (39 percent to 23 percent) while access to unimproved latrines rose from 59 percent to 73 percent. Access to improved latrines remained relatively flat throughout the life of HIP due to the uptake of due to the coup.

Figure 2: Comparison of Changes in Household Hygiene Practices



A commonly used proxy measure for hand washing is the presence of soap and water at hand washing stations. HIP tracked the presence of these supplies both at commonly used hand washing stations in the household as well as latrines, if families had one. The table below shows the changes in presence of soap but a slight drop in presence of both soap and water supplies, and a heartening rise in hand washing stations near latrines. The big challenge here, as in Ethiopia, and indeed with all no-subsidy demand driven sanitation efforts, is to help people move from basic to better sanitation and hygiene.

Figure 3: Changes in Presence of Hand Washing Supplies



At-Scale WASH Products and Tools—Madagascar

- Guide Illustré—illustrated guide of PAFIs and méthodes alternatives (in Malagasy and French)
- Posters, flyers, and counseling cards
- Integration of the three key hygiene practices in USAID/Santénet 1 and 2 Champion Community handbook
- Guide Ecole Amie de Diorano-WASH—French
- Guide to Set Up WASH-Friendly Community Health Centers (French and English)
- Negotiation tools on the three key practices (Malagasy and French)
- WASH guides for scouts and troop leaders (Malagasy and French)
- Sermonette guide for WASH-friendly churches
- Construction guide for improved latrines: with SanPlat slabs and superstructure
- Consumer research report
- Business plans—privately owned and run bloc sanitaire and hygiene/sanitation products store
- Assessment of Hygiene Promotion in Madagascar, 2007-2008 Comparisons (English and French)
- Household Outcome Monitoring Survey 2007-2010 Comparisons

These resources, developed to support HIP's hygiene promotion activities in Madagascar, are available on the HIP website at: http://www.hip.watsan.net/page/2471.

Madagascar-Specific Components of Success

Several factors contributed to the success of HIP's activities in Madagascar. First, initial and sustained support from USAID/Madagascar to the global HIP program gave legitimacy and local identity to HIP/Madagascar. Annual funding increases from the Mission motivated the team.

USAID/Madagascar's policy of coordination and collaboration among its health, population, and nutrition projects allowed HIP to partner with Santénet 1, Santénet 2 (Champion Community program), Voahary Salama, RanoHP, and others. This supported the "multiples" effect.

Second, the ability to employ regional and national staff, and HIP's chief of party's careful personnel recruitment and management, led to a dynamic, empowered implementation team. Third, a "WASH Everywhere" vision embraced the multiples concept and emerged from experiments by different regional coordinators who expanded the WASH-friendly school or health center models. And fourth, the culture of flexibility and experimentation in regions where HIP worked allowed innovation to flourish.

Reflections on Successfully Starting at Scale

While HIP had confidence that starting at scale would yield results, it was not certain how the programs would evolve. Unlike project-led programs, working at scale meant relinquishing total control and trusting in the process to create momentum and ultimately generate results that everyone could own and grow.

As HIP journeyed through the SCALE process in two countries, it became clear that each situation and context is unique, yet some components can be generalized across the different "systems."

1. **Partner and leadership buy-in is critical for creating an enabling environment.** The nature of at-scale programs requires engagement from many levels simultaneously. Government is critical because it provides the vehicle that can reach all citizens and influence the actions of all in society. The Whole System in the Room helps facilitate ownership and brings together myriad stakeholders who may not usually think to collaborate.

2. **Integrating the at-scale hygiene and sanitation initiative into the existing institutional framework means that sustainability is —built in" from the outset.** Grounding this innovation in an established entity (the Government of Ethiopia's Maternal and Child Health/Health Extension Program and Madagascar's Diorano-WASH platform) gave the at-scale programs legitimacy, national recognition, access to decision makers, and the ability to strengthen capacity and influence national policy. In Ethiopia it ensured a dedicated cadre of outreach workers at the grassroots level with a certain degree of reach; in Madagascar it ensured a wide net of sector partners. It helps if the established organization is not resistant to change, can embrace risk, and is sufficiently confident to do things differently.

3. **Coordination among three technical ministries—health, education, water—is essential.** In Madagascar, HIP strongly supported Diorano-WASH's efforts to include all key ministries in WASH programs. In Ethiopia, HIP benefited from the formal MOU among the key ministries at the federal level, and through WSP, supported the signing of a regional MOU.

4. **Behavior change communication materials are meant to be adopted by multiple partners.** Often collaborating partners feel materials are proprietary. HIP's at-scale approach sought to avoid institutional rivalry and competition and worked to gain broad based endorsement from the outset and offered tools that were freely available to all to get a job done. Government, private commercial, and NGO sectors used these tools, which included the Woreda Resource Book; outreach worker training in CLTS; and materials on negotiating improved WASH practices, small doable actions (PAFIs in Madagascar), and thematic drawings on posters, flyers, job aids, etc.

5. **Systematic capacity building of many actors at all levels is key and must go beyond one-off training workshops.** Building capacity also means agreement on key competencies for a range of actors. Training is not enough. HIP identified focused opportunities to build these competencies through well-designed training activities; focused mentoring over time that moved to internal mentoring and technical assistance; supportive supervision; frequent use of performance indicators; and other elements that built and maintained performance over time.

   This is hard to do, with revolving counterparts and demands on limited cadres of outreach workers who are the focal point of many internal and external training programs. In some countries a cadre of professionals, who have little incentive to go beyond perfunctory performance and are too often dependent on per diem income to survive on meager government salaries and rising costs, can encourage inappropriate assignments to training activities and lead to half-hearted participation.

6. **Implementation of the scale model requires an ethos of flexibility, innovation, and experimentation.** The capacity to be flexible, innovative, and willing to take risks is perhaps the most important factor in scale success. The Ethiopia Federal Ministry of Health/Environmental Health Unit and the Amhara Regional Health Bureau embraced the challenge and took pride in pioneering a new approach. HIP/Madagascar embraced HIP models from other countries (Ethiopia's CLTS hybrid, Uganda and Peru's sanitation marketing, Ethiopia and Peru's negotiation tools) and adapted them to Madagascar's circumstances. The program also had to demonstrate flexibility to rapidly shift course in response to political changes in Madagascar. Both countries made adjustments, adapted to new realities, and motivated multiple partners to work together to achieve success.

7. **The strategy of mobilizing the political leadership and engaging communities through community-led processes and outreach to households—the key components of the scale approach—show encouraging results and outcomes.** Investing in at-scale programming takes time, but starting at scale works. Project evaluation and anecdotal evidence show that elements such as engaging the multiples (sectors, behaviors, channels, etc.), increasing and enhancing partnerships, and igniting communities are breaking out of well-worn tracks and leading toward at-scale, sustained hygiene and sanitation improvement.

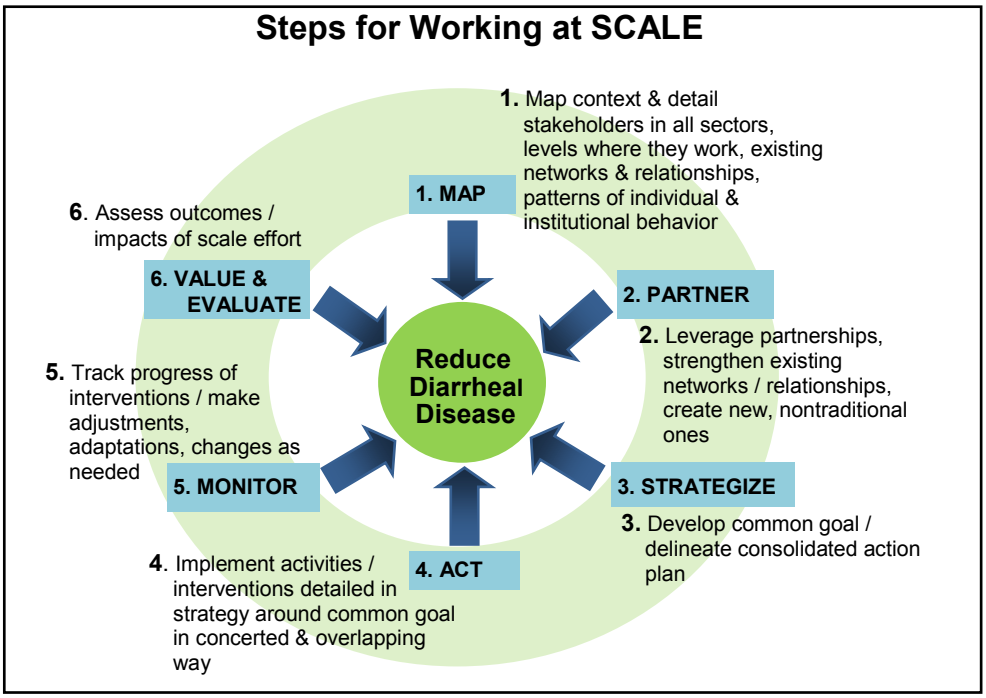
Annex: Framework and Tools for At-Scale Hygiene Improvement

HIP's Approach to Programming at Scale

As described in the beginning of this document, HIP brought together several complementary change theories and frameworks to achieve hygiene and sanitation improvement at scale. HIP adapted AED's SCALE approach to focus program resources on increasing and enhancing partnerships, based on network analysis that shows that more and stronger linkages exponentially increase reach and effectiveness. Using the Whole System in the Room methodology, HIP facilitated exchanges that encourage people to examine problems in their larger context, dream of long term outcomes, identify common ground, and then plan a common action agenda.

The Hygiene Improvement Framework (pictured on page 1) demonstrates how access to essential hardware and supplies, a supportive or "enabling environment" such as policy and competent institutions, and promotion, behavior change, and mobilization lead to hygiene and sanitation improvement. The HIF reinforces the scale approach by underscoring that hygiene promotion by itself is not enough. HIP used this framework to guide comprehensive hygiene and sanitation improvement programming.

The basics steps of the SCALE process are listed and illustrated by the diagram below: map the context**,** catalyze/ build partnerships, strategize, act, monitor, value and evaluate.



This annex provides guidance for each step in the hygiene improvement programming process and links to some of the tools that HIP adapted from the Future Search Network, which developed the Whole System in the Room methodology. This is not intended to be a complete toolkit. The tools most closely adapted from the Future Search Network are only available to those participating in a WSR workshop facilitation, hiring a WSR facilitator, or purchasing books. For more information, see the Future Search website at www.futuresearch.net.

The tools and resources HIP developed for working at scale are available through the links provided in this annex. In addition, HIP adapted a complete set of tools and guidance on how to organize and conduct a WSR meeting for the program in Ethiopia; see: **Toolkit for At-Scale Hygiene Improvement in Amhara, Ethiopia**, at http://www.hip.watsan.net/page/5307

1. Map the Context

Before starting, it is necessary to understand who is involved in water, sanitation, and hygiene improvement and what they are doing. This is done by mapping the context. Program planners must detail all the stakeholders working in WASH in all sectors; the different levels at which the stakeholders work (national, state, district, etc.); and the networks and relationships that already exist. In addition, it is necessary to examine patterns of behavior of individuals and institutions. The list in the box below describes the issues to map.

Issues to Map

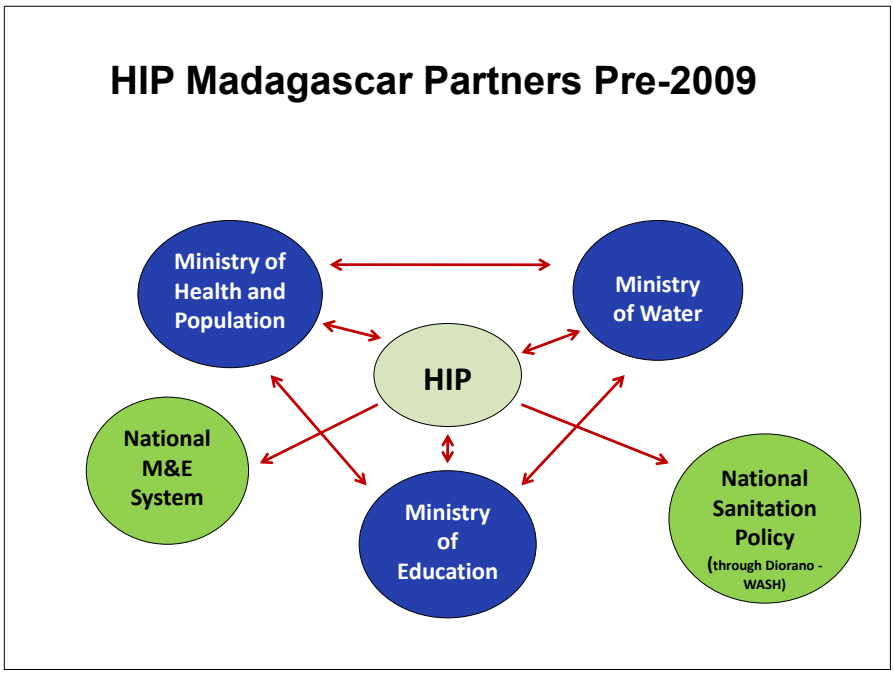
- Water sources, access, quality, and supply
- Sanitation access, quality, and supply
- Partner areas of intervention and activities
- Partner relationships
- Geographic location of institutional staff and kinds of interventions
- Geographic areas of greatest need including health and non-health platforms
- Existing infrastructure (e.g., clinics, schools, churches, etc.)
- Socioeconomic status indicators (e.g., income, gender, etc.)
- Capabilities of ancillary agencies (e.g., universities, colleges, markets, roads, railroads)
- Market paths and streams per needed product
- Communication channels
- Donor program support

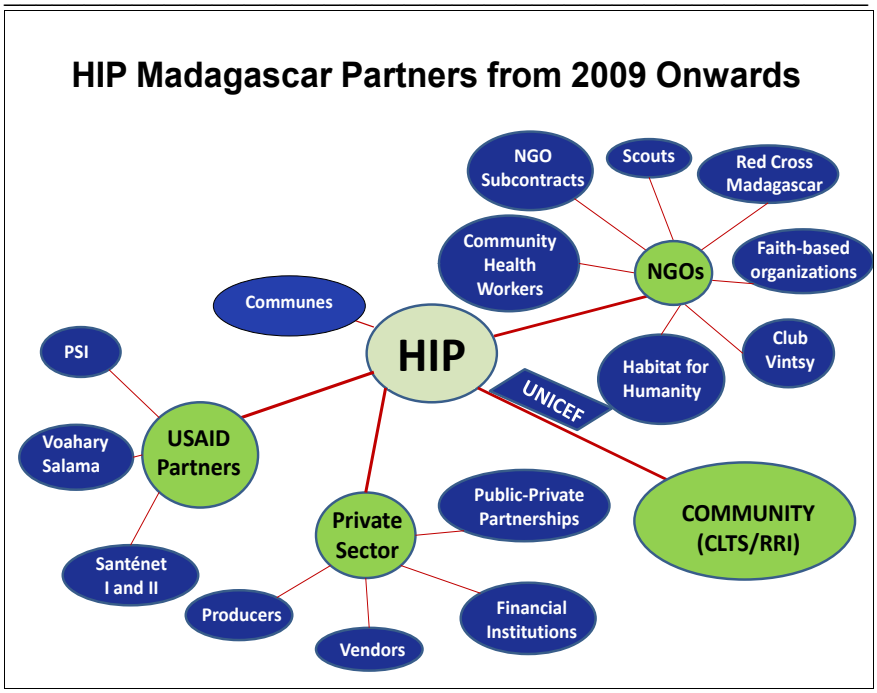
Tools and Resources

- HIP developed a **WASH Mapping Tool**, available at: http://www.hip.watsan.net/page/5308

2. Catalyze Partnerships and Coalitions

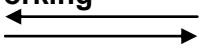
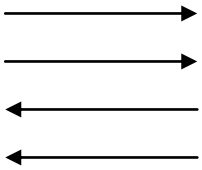
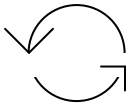
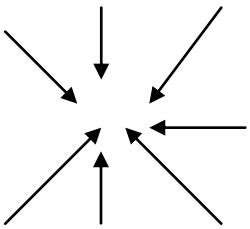
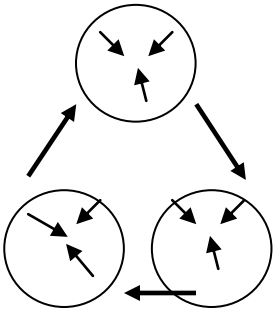
HIP based its approach on the principles of multiples, including multiple partners, channels, levels, strategies, and messages. A key to the at-scale approach is to develop and strengthen partnerships and existing networks. It is also important to create new, nontraditional partnerships. Below are diagrams showing the relationships between the various WASH partners that HIP worked with in Madagascar up until the coup d'état in early 2009 and then after the coup. HIP was required to shift away from working with government partners and institutions and create a broader partnership that included NGOs, communities, and the private sector.


HIP Madagascar Partners Pre-2009
Ministry of Health and Population
Ministry of Water
HIP
National M&E System
Ministry of Education
National Sanitation Policy
(through Diorano - WASH)


HIP Madagascar Partners from 2009 Onwards
NGO Subcontracts
Scouts
Red Cross Madagascar
Community Health Workers
NGOs
Faith-based organizations
Communes
HIP
Club Vintsy
PSI
Habitat for Humanity
UNICEF
Voahary Salama
USAID Partners
Public-Private Partnerships
COMMUNITY (CLTS/RRI)
Private Sector
Santénet I and II
Producers
Financial Institutions
Vendors

Types of Group Involvement

Partnerships and coalitions can have various levels of member involvement and formality that range from information sharing to a contractual relationship in which funds are commingled. New groups should analyze and define the level of involvement and formality they need for the objectives they want to achieve. In general, informal partnerships and coalitions are best when the objective is specific and can be achieved relatively quickly. When the objective is complex and may take a long time to achieve, it may be necessary to formalize the partnership or coalition through a contractual arrangement that provides a structure for decision making and negotiation. Partnerships and coalitions can also evolve from less formal to more formal arrangements over time. For example, several groups may start by networking and sharing information. As common ground and mutual interests are recognized, the groups may begin to coordinate their activities. Successful completion of those activities could lead to a formal coalition. The following chart illustrates the various levels of involvement and the type of activities the group would undertake for each level.

Ways of Working	Level of Involvement	Collaborative Activities
Networking 	Informal, minimal	Share information, understanding. Clearinghouse for information. Explore common and conflicting interests.
Coordinating 	More formal, but organizations still work independently	Exchange ideas and collaborate for access to services and products.
Contributing 	Support group	Mutual exchanges to support each other's efforts. Provide technical assistance. Build mutual obligation and trust.
Cooperating 	Formal, with some integration of work, but organizations still remain autonomous	Develop mutual norms and strategies for collaborative action. Link resources to help parties achieve joint goals. Discover shared interests. Build trust by working together on collaborative action.
Collaborating 	Formal, with direction provided by an inter-organizational governing body; joint strategies and actions; possible commingling of funds	Create organizational mechanisms and structures that facilitate joint development and implementation of strategies including shared leadership, common decision-making processes, and coordinated communications. Build interdependent system to address issues and opportunities. Share resources. Legal/contractual relationships.

Source: This chart is adapted from BethAnn Berliner. (1997) What It Takes to Work Together: The Promise of Educational Partnerships, Knowledge Brief #14. San Francisco: WestEd. Other information is adapted from Ellen Taylor-Powell, Boyd Rossing, and Jean Geran. (1998) Evaluating Collaboratives: Reaching the Potential. Madison, WI: University of Wisconsin Cooperative Extension.

Types of Partnerships and Coalitions
Various kinds of partnerships and coalitions exist. Deciding which kind best suits you will help to clarify and establish roles from the start and may help avoid future conflicts over goals, objectives, and processes. Emily Gantz McKay describes five types of coalitions:[10]

1. **One-project coalitions** are formed for a specific purpose and exist only until that purpose has been accomplished (e.g., to support specific legislation or to oppose construction in wetland area).
2. **Single-issue coalitions** work on a variety of activities related to a specific issue (e.g., land titling or illegal logging).
3. **Target-group coalitions** work on behalf of a particular population group (e.g., women or specific indigenous groups).
4. **Broad-focus coalitions** work on a broadly defined set of related issues, with the specific focus changing over time (e.g., environmental coalitions that act on multiple resource-use issues, rather than focusing on just one).
5. **Service-providing coalitions** work together to provide services in a particular community or to a certain target group (e.g., a coalition of community forest concessions selling lumber, providing ecotourism services, and marketing nontraditional forest products).

Tools and Resources

- **Partner and Coalition Handout** (Worksheet and Checklist), http://www.hip.watsan.net/page/5310

3. Strategize

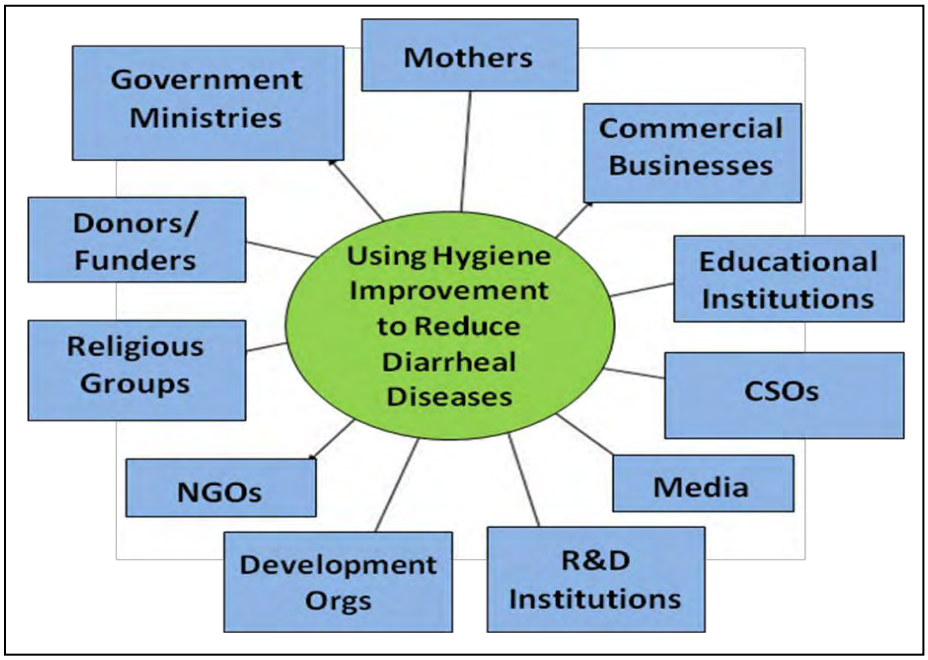
HIP used the Whole System in the Room to provide a forum where representatives of the entire system of diverse sectors and stakeholders related to an issue can come together and develop a common understanding and vision. As Marvin Weisbord of Future Search said, "People will support what they help create."[11] WSR workshops bring together a mix of people who have the **critical mass of information, skills, and commitment** that informs and enriches the change process. Using the WSR process, stakeholders can:

- Develop a common vision about the issue
- Analyze the current reality and decide what needs to change
- Generate ideas about how and what to change
- Commit to short-term (three months) and long-term (three years) implementation plans toward the common vision

---

[10] McKay, Emily Gantz. (2001) "Building Effective Coalitions, Collaboratives, and Consortia: A Toolkit for Building Capacity." Washington, DC: Annie E. Casey Foundation & Academy for Educational Development.
[11] Weisbord, Marvin R. (1987) Productive Workplaces: Organizing and Managing for Dignity, Meaning and Community. San Francisco: Jossey-Bass.

Bringing the Whole System in the Room



Whole System in the Room Principles

WSR principles set the stage for a different kind of participatory workshop:

- The **whole system** participates—a cross-section of as many interested stakeholders as practical. For example, in hygiene improvement that could include journalists, tour operators, agribusiness representatives along with the ministries of health, water, and education. This means more diversity and less hierarchy than is usual in a working meeting, and a chance for each person to learn other ways of looking at the task at hand.

- Future scenarios—for an organization, community, or issue—are put into **historical** and **global** perspective. That means thinking about and framing the "big picture" together before acting locally. This feature enhances shared understanding and greater commitment to act.

- People **self-manage** their work and use **dialogue**—not problem solving as the main tool. That means helping each other do the tasks and taking responsibility for perceptions and actions.

- **Common ground** rather than conflict management is the modus operandi. That means honoring rather than reconciling differences.

- Participants are invited to **take responsibility** for their views, commitments, and action plans.

Tips for Planning a Whole System in the Room Workshop

1. Form a Steering Committee of key stakeholders to plan the WSR workshop using the "Planning a Whole System in the Room Workshop" Worksheet. **Three months before event**.

2. Develop an invitation list with the committee. Ideally, eight stakeholder groups are invited with eight representatives for each organization/institution/individual within the group. The committee should specify names of the decision makers for each proposed organization. Decision makers must attend to be able to make commitments that will be followed through. The list can be developed through visits, telephone calls with committee members, or listserv e-mail messages. The list should be finalized **four to five weeks before the event.**

3. Notify authorities about the event in case authorization is needed and confirm that no major conflicts exist (e.g., other scheduled events). **Five weeks before the event.**

4. Determine location of the event **five weeks in advance**. One large room with high ceilings that can accommodate up to 100 people comfortably is essential for the event. Having two or three breakout rooms is helpful but not a must. It is good to take the participants away from the city where they work to put them in a "retreat" type atmosphere. Everyone should be fully involved and not distracted by their day-to-day responsibilities. The evenings should be times for everyone to socialize as much as possible.

5. Send out invitations, ideally **four weeks before the event**. These can be mailed or posted or hand delivered. Steering Committee members should champion the effort, making personal calls to ensure proper attendance. They can even start calling prospective invitees prior to the written invitation being distributed, just so important decision makers put the date on their calendars.

6. Contract two professional facilitators to implement the workshop. They will be fluent local language speakers and experienced with the WSR principles and methodologies. Two additional "trainees" should be identified to build local capacity in the methodology. They do not necessarily need to have experience in the "issue" being discussed at the workshop, although familiarity with the key issues is helpful. They should be comfortable facilitating large group events and be committed to allowing a self-managed approach. It is good to have a contract with the facilitators in place **six to eight weeks before the event**.

7. Make telephone calls to all invited guests to enhance their interest in the event and confirm their participation. Participation should be confirmed in writing at least **two weeks before the workshop**.

8. Hold a three-day training for facilitators **one week before the event**. (Two days will be spent training and one day for workshop preparation.)

9. Purchase supplies for workshop at least **one week before event.**

(Source: WSP/HIP, Toolkit for At-Scale Hygiene Improvement in Amhara, Ethiopia)

WSR Conditions for Success Checklist

____ The **whole system is in the room and participating:** Participants represent as wide a variety of stakeholders related to the issue as possible. The more diverse the participants, the greater will be the innovation and potential for shared implementation.

_____ **The future scenarios are put in historical and global perspective**, encouraging participants to think together comprehensively before acting locally. This approach fosters a shared understanding and a higher commitment to common goals.

____ During the workshops the **groups are self managed** where everyone shares information, interprets it, and decides action steps. Groups rotate roles among a discussion leader, recorder, reporter, and timekeeper. This shifts the locus of control from the external facilitators to the groups and helps participants take responsibility for their opinions, commitments, and action.

____ **Common ground is the frame of reference** rather than "conflict resolution." Participants are encouraged to honor and appreciate differences in perspectives rather than try to reconcile them.

____ Participants **attend the entire workshop**, from beginning to end! Participants can't really participate in creating a common future if they haven't experienced the understanding of the common past.

____ There are **"healthy" meeting conditions** with light, airy rooms, and good food.

____ Participants dedicate three days and two nights **in residence**, immersing themselves in the topic and not going home to distractions. The three-day agenda is organized in a way that allows participants time to think about and then "sleep on" what they have discussed.

____ Participants **make a public commitment** and take responsibility for follow up on what is agreed.

(Source: WSP/HIP, Toolkit for At Scale Hygiene Improvement in Amhara, Ethiopia)

Tools and Resources

Whole System in the Room Strategizing Tools, http://www.hip.watsan.net/page/5309

4. Implement Consolidated Action Plan

Based on the common goal and initial plans developed in the WSR workshop, the implementers need to finalize a Hygiene Behavior Change Strategy and Consolidated Action Plan that will ensure coordination with the existing national hygiene and sanitation strategy and other policy documents in use.

Stakeholders must begin to implement the activities and interventions they have committed to, feeding into the strategy and action plan that contribute to the common goal agreed upon in the WSR. While all the partners are working in a concerted and harmonized way to contribute to the common goal, no one group will be able to control implementation because the whole system is involved.

Develop a Behavior Change Strategy
Systems approaches are far less orchestrated than evidence-based, systematic behavior change strategies, leaving the specific activity design to the various stakeholders regardless of particular data. The focus is on engaging multiple partners, sectors, organizations at multiple levels with coordinated action toward a common goal. HIP's hybrid scale approach incorporated widespread hygiene promotion of the three key practices and small doable actions using the principle of multiples, enhanced interpersonal communication to encourage or negotiate improved WASH practices, and an increasingly popular community mobilization approach called community-led total sanitation.

HIP's approach to at-scale hygiene improvement includes **negotiating improved practices** through the promotion of easy to adopt WASH improvements or **small doable actions.** Developed using participatory formative research, these small doable actions are effective and feasible behaviors (given the resources and context) that incrementally move households toward ideal hygiene practices and public health impact. HIP developed country-specific small doable actions for hand washing, safe water, and safe feces disposal and job aids for community outreach workers.

Tools and Resources

- **Sample Behavior Change Strategy:** *Amhara Regional Behavior Change Strategy*. Amhara Regional Health Bureau, HIP, WSP. 2007. http://www.hip.watsan.net/page/5304
- **Sample Negotiating Tools from Madagascar** http://www.hip.watsan.net/page/3311, and **Ethiopia** http://www.hip.watsan.net/page/3524
- **Sample Guidelines:** *Technical Guide for Creating WASH-Friendly Health Centers,* http://www.hip.watsan.net/page/3225 (French); http://www.hip.watsan.net/page/3516 (English). *WASH-Friendly Schools Basic Guide for School Directors, Teachers, Students, Parents and Administrators.* HIP, 2010. http://www.hip.watsan.net/page/5009

5. Monitor Progress

Monitoring is important to see what progress is being made in the area of hygiene improvement. HIP used a multilevel monitoring and evaluation framework to assess the outputs and impact of the at-scale interventions in Ethiopia and Madagascar. In Ethiopia this framework included indicators to assess change at multiple levels—institutional, community/school, and household. The baseline survey conducted in 2008 included a rigorous design that measured these indicators within high-intensity districts and across districts where other development partners were focusing efforts. In Madagascar, HIP participated in USAID's annual outcome monitoring exercise for all health sector projects and developed household indicators for WASH activities. HIP also developed a separate survey for schools and health centers.

Tools and Resources

- **Household Assessment Tool** (Ethiopia), http://www.hip.watsan.net/page/3328
- **WSR Partner and Coalition Handout** (Worksheet and Checklist), http://www.hip.watsan.net/page/5310
- **Sample Indicators:**
    - *Evaluation Grid for Assessing WASH-Friendly Schools,* HIP, 2010 http://www.hip.watsan.net/page/5324

- *Access and Behavioral Outcome Indicators for Water, Sanitation, and Hygiene***.** HIP, 2010 http://www.hip.watsan.net/page/4148
- *WASH-HIV Indicators.* HIP, 2009 http://www.hip.watsan.net/page/4551
- *Monitoring and Evaluation Framework for the Amhara Region "Learning by Doing" Program***,** ARHB, HIP, WSP, 2008. http://www.hip.watsan.net/page/3194

6. Value and Evaluate

Evaluation is used to assess the outcomes and impact of the at-scale effort and to determine the effectiveness of the coordinated effort. Documenting lessons learned is also part of the evaluation process. Evaluation helps to provide feedback for the national hygiene and sanitation strategy or other policy efforts underway. Evaluation also helps to adjust the at-scale approach as needed for continued action and for replication in other regions or countries.

Tools and Resources

- **Monitoring and Evaluation Framework for the Amhara Region —Leaning by Doing" Program to Achieve Universal Hygiene and Sanitation.** HIP, WSP, ARHB, 2008. http://www.hip.watsan.net/page/3190
- Examples of HIP success stories from its experience working at scale and other program activities can be found at http://www.hip.watsan.net/page/4138

U.S. Agency for International Development
Bureau for Global Health
Office of Health, Infectious Diseases and Nutrition
1300 Pennsylvania Ave.
Washington, DC 20523

www.usaid.gov