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# Integrating Hygiene Promotion into World Bank Projects: Experiences from Colombia and Peru

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## **Integrating Hygiene Promotion into World Bank Projects**

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# I. Introduction

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This report is designed to help project leaders from sectors such as water and sanitation, environment, health, education, and social protection identify effective strategies for integrating hygiene promotion components that will enhance the results and long-term impacts of World Bank-financed projects. These opportunities for integrating hygiene promotion are based on concrete research and pilot initiatives that have provided quantitative and qualitative results indicating a need for increased attention to hygiene behavior change and its link to long-term development impacts.

In developed countries, diarrhea is seen as little more than an inconvenience, but in developing countries, it can be life threatening. Significant efforts were made to reduce deaths related to diarrheal disease in the 1970s and 1980s, but momentum has slowed and today, diarrheal disease continues to be a leading killer of children worldwide, second only to pneumonia.<sup>1</sup> Globally, around 2.4 million deaths (4.2 percent of all deaths) could be prevented annually if everyone practiced appropriate hygiene and had good, reliable sanitation and drinking water.<sup>2</sup>

Over the past seven years, the World Bank's Water and Sanitation Program (WSP) has gained significant experience in the field of hygiene-related behavioral change, particularly with regard to handwashing with soap and especially in Latin America.

Research shows that the household is at the core of understanding how to change behavior and create effective hygiene promotion programs that are sustainable and scalable in order to effect change at the national level. Proper hygiene is closely correlated with the availability of good sources of water and a proper place to dispose of waste.

WSP hosted the Secretariat for Global Public-Private Partnership for Handwashing with Soap from 2003–2009 to help compile lessons learned on handwashing promotion and

to serve as a clearinghouse for knowledge in this area. WSP is learning from previous handwashing initiatives in Ghana, Senegal, Peru, India, and other countries and expanding programs into new areas through its partnership with other leaders in hygiene promotion, such as the London School of Hygiene and Tropical Medicine, UNICEF, USAID, and the Academy for Educational Development.

Support from the Bill & Melinda Gates Foundation—amounting to nearly US\$ 20 million over the past three years for the Global Scaling Up Handwashing Project carried out in Peru, Senegal, Tanzania, and Senegal—has enhanced WSP's knowledge of evidence-based behavioral change programs implemented on a large scale. Over the course of this learning process, knowledge has been generated and methodologies and tools have been validated in areas such as fostering an enabling environment for sustainability; integrating hygiene promotion into private and public programs related to nutrition, water and sanitation, infrastructure, and education; and local capacity building and monitoring and evaluation.

WSP has supported World Bank operational teams in the design and implementation of project components, either by sharing documentation or by working closely with them. This collaboration has resulted in lending operations that have a clear development impact. With varied results, there is now enough experience to provide grounds for a sharper focus on strategic opportunities for incorporating hygiene behavior change into lending operations.

The following is an experience-based report that aims to provide practical information on the collaborative process as well as illustrate how a hygiene component may be tailored to project needs and the benefits it can add.

Water and Sanitation Program

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1 UNICEF, WHO. Diarrhea: Why Children are Still Dying and What Can Be Done, 2009.

2 Bartram J, Cairncross S (2010) Hygiene, Sanitation and Water: Forgotten Foundations of Health. PLoS Med 7 (11): e1000367. doi: 10.1371/journal.pmed.1000367.

## II. A Multisectoral Approach to Integrating Hygiene Promotion Programs

WSP has directed much of its efforts to supporting hygiene promotion programs that focus on improved behavior with regard to handwashing with soap, and then supporting governments' efforts to scale these programs up to the national level to increase the overall health impact on targeted populations.

A major advantage of hygiene promotion is that it is multisectoral. Although typically placed within the health sector, it is commonly considered part of education curricula. It is also a component of governments' environmental and risk management programs; it accompanies infrastructure investments in water and sanitation; and, given its impact on diarrhea reduction, it is a fundamental part of current efforts to reduce childhood malnutrition in several countries in the world.

### Hygiene and Health

The World Health Organization (WHO) estimates that "about 2.4 billion people globally live under highly unsanitary conditions and have such poor hygiene behaviors that their exposure to risks of incidence and spread of infectious diseases [is] enormous."<sup>3</sup> Globally, hands are washed with soap on less than 20 percent of the critical occasions and only 60 percent of the world's households have access to sanitation.<sup>4</sup>

Considerable efforts have been made to provide infrastructure and health services to prevent the occurrence of infectious diseases in developing countries, but the health benefits have not been commensurate with the investments. Diarrheal disease and acute respiratory infections (ARIs) combined kill more children under the age of five than any other causes of death<sup>5</sup> (almost 3.5 million annually worldwide).

In addition, although water supply and sanitation services are critical for public health, investment in sanitation falls short

of the level needed, and initiatives to improve household hygiene have been neglected in favor of infrastructure and public health programs.

### Hygiene and Infrastructure

Evidence shows that 94 percent of all cases of diarrhea globally are attributable to problems related to water, sanitation, and hygiene.<sup>6</sup> For infrastructure projects, however, governments typically focus investments on construction works (hardware) rather than on financing to ensure that newly built infrastructure is demand driven or used appropriately by beneficiaries (software).

Experience in the water and sanitation sector in Asia has proven conclusively that infrastructure alone is not enough to deliver health benefits from water and sanitation interventions, but that improved hygiene and sanitation practices (coupled with safe drinking water) are the most important determinants of improved health resulting from investments.

In order for the benefits of new infrastructure to be realized, it is important that hygiene and sanitation practices not be add-on aspects of infrastructure development, but rather a key component of a range of people-centered (software) initiatives. Hygiene promotion is not an explicit indicator of the sanitation Millennium Development Goal (MDG) target, nor is it explicitly identified with a sector code in the Bank investment system. There is, however, widespread consensus that meeting the hardware-related sanitation MDG target without effective behavior change in hygiene promotion will do little to reduce poverty, the fundamental purpose of the MDGs.<sup>7</sup>

### Hygiene and Nutrition

Diarrheal disease is easily preventable and treatable, but children with poor health are more susceptible and are at greater risk of

3 WHO: [http://www.who.int/water\\_sanitation\\_health/hygiene/envsan/en/](http://www.who.int/water_sanitation_health/hygiene/envsan/en/)

4 UNICEF. Handwashing Training Module 2008.

5 UNICEF. State of the World's Children 2008.

6 A. Prüss-Üstün and C. Corvalán, WHO, Global Assessment, World Health Organization, 2006.

7 Kolsky et al., 2005.

life-threatening dehydration since water constitutes a greater proportion of a child's body weight.<sup>8</sup> Malnourished children are also at higher risk of suffering more severe, prolonged, and often more frequent episodes of diarrhea. Furthermore, "when malnourished children are recovering from an episode of diarrhea, they are susceptible to pneumonia; this diarrhea-induced susceptibility may be associated with as much as 26 percent of all childhood pneumonia episodes."<sup>9</sup>

Repeated bouts of diarrhea place children at greater risk of disease due to decreased food intake and reduced nutrient absorption. Lack of nutrition and appetite loss also inhibit vital growth. Therefore, diarrheal control, particularly in the first six months of life, may help to reduce the prevalence of stunting among children.<sup>10</sup>

Until recently, the health promotion programs conducted in African countries by the World Bank Human Development Network (HDN) typically focused on "information, education, and communication" and applied a unidirectional communication approach without a clear intention of changing behaviors.<sup>11</sup> While it is important that information be readily available, there are opportunities to go further, combining the provision of information with complementary activities that change behavior and reduce diarrheal disease and other diseases associated with poor hygiene.

### Hygiene and the Environment

An estimated 94 percent of the burden of diarrheal disease is attributable to the environment and associated with risk factors such as unsafe drinking water, lack of sanitation, and poor hygiene.<sup>12</sup>

Although research is increasingly pointing to hygiene promotion, specifically handwashing with soap, as the most effective method to reduce not only the risk of diarrhea, but also of ARIs, a clean water supply and appropriate sanitation facilities play a major role in preventing the transmission of bacteria and viruses that cause diarrhea.

### Hygiene and Education

School health programs offer a good entry point for hygiene behavior modification as teachers can reinforce health and hygiene messages and set an example for students, who can then be advocates for improved hygiene at home and in their communities.

WHO projects have shown that an approach targeting water, sanitation, and hygiene simultaneously in schools results in (i) a reduced disease burden among children, staff, and their families; (ii) the adoption by school children of lifelong positive hygiene behaviors; and (iii) the promotion of safe environments at home and in the community, among other impacts.

When all benefits are taken into consideration, investments in hygiene, sanitation, and water yield a net benefit ranging from US\$ 3 to US\$ 46 per dollar invested, not counting the value-added of an increase in school attendance, as data suggests, among families with access to safe water and proper sanitation.<sup>13</sup>

### Hygiene and Social Protection

Some countries are utilizing conditional cash transfer (CCT) programs as a means of incentivizing hygiene-promoting behaviors. In Mexico, *Oportunidades* is the principal anti-poverty program implemented by the Mexican Government—by providing cash transfers to households based on regular school attendance and health clinic visits, the program helps fulfill the aim of alleviating poverty. As a result of the program, important positive impacts were reported in school enrollment, health clinic attendance, and nutrition. In Peru, *Juntos* is at the core of the *CRECER* strategy, and since 2005, it has sought to increase demand for health and education services and alleviate income poverty, as well as improve current nutrition, health, and education indicators. In both countries, mothers are required to participate in monthly educational forums and sessions on health and hygiene as a prerequisite for receiving the incentive (see case #2).

8 At birth, children are 75 percent water weight. An average adult is approximately 60 percent water weight.

9 Bartram J, Cairncross S (2010) Hygiene, Sanitation and Water: Forgotten Foundations of Health. *PLoS Med* 7 (11): e1000367. doi: 10.1371/journal.pmed.1000367.

10 UNICEF, WHO. Diarrhea: Why Children are Still Dying and What Can Be Done, 2009.

11 Elmendorf, E. et al., *Behavior Change Communication for Better Health Outcomes in Africa*, The World Bank, 2005.

12 Pruss-Ustun, A., and Corvalan, C., The World Health Organization. Preventing Disease Through Healthy Environments: Toward an Estimate of the Environmental Burden of Disease, 2006.

13 Bartram J, Cairncross S (2010) Hygiene, Sanitation and Water: Forgotten Foundations of Health. *PLoS Med* 7 (11): e1000367. doi: 10.1371/journal.pmed.1000367.

# III. Focusing on Behavior Change

Sustained hygiene-related behavioral change comes about when it is endorsed by leaders and authorities in a community, when it is integrated into health protocols and education curricula, and when the impact on health is evident. It is not the result of a sporadic communication campaign, but rather of systematic and lasting multi-channel communication efforts using a varied network of well-trained “change agents” and using interpersonal methods as well as direct consumer contact events and mass media.

Qualitative and quantitative research is required to determine effective strategies that will result in the adoption of a certain behavior. Research findings will provide insight into the conditions that could trigger or hinder behavioral change and will therefore guide the design of communication strategies targeted to reach a specific audience.

The approach to behavioral change utilized by WSP has focused on multisectoral engagement to involve diverse individuals and institutions in a community: local governments, health and education authorities, local leaders and community-based organizations (CBO), and families.<sup>14</sup> (see Figure 1). Emphasis is placed on the need to identify opportunities in existing and ongoing projects or programs in order to avoid duplication. By focusing on potential points of entry within existing initiatives, multi-channel communication that incrementally includes local and national stakeholders has rapidly gained legitimacy and helped identify innovative opportunities for reaching target populations.

Although hygiene promotion programs vary in scope and size, WSP utilizes a general framework or methodology that consists of (i) an assessment to determine the enabling environment for scaling up a program; (ii) behavioral research to identify which specific practices are allowing diarrheal

disease to be transmitted and the motivating factors to change them; (iii) program design and implementation to develop a hygiene promotion strategy that is responsive to the level of awareness of behavior and that provides a process for measuring behavior change; and (iv) a process for monitoring and evaluation, which is critical in order to determine the impact and cost effectiveness of the program.

### The Power of Handwashing with Soap

Over the years, studies conducted at the global level have demonstrated the effectiveness of adequate handwashing with soap at reducing diarrheal diseases and promoting a healthy environment.

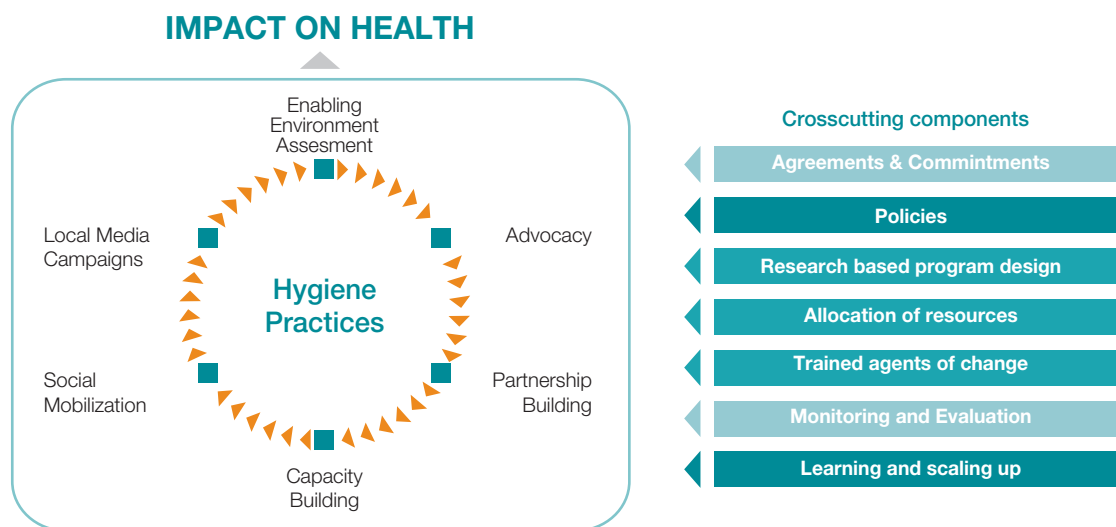
**Van Maanen (2010):** This literature review about evidences of water, sanitation and hygiene interventions shows that “handwashing can be a critical measure in controlling pandemic outbreaks of respiratory infections. Several studies carried out during the 2006 outbreak of severe acute respiratory syndrome (SARS) suggest that washing hands more than 10 times a day can cut the spread of the respiratory virus by 55 per cent” (BMJ 2009). It also finds “that handwashing in institutions such as primary schools and daycare centers reduce the incidence of diarrhoea by an average of 30 per cent” (Cochrane 2008).

**Curtis & Cairncross Study (2003):** This study demonstrates the power of soap and its direct connection to diarrheal diseases. Results show that adequate handwashing with soap can reduce diarrhea by up to 47 percent. The study also indicates that handwashing with soap can save millions of lives, making a strong case for addressing hygiene behavior within national policies in developing countries. It also concludes that changing human behavior is not in itself difficult, but that appropriate strategies that motivate target populations are required.

**Luby Study (2005):** This study focused on Karachi, Pakistan, and demonstrated that households that were exposed to handwashing promotion and free soap over a nine-month period reported a reduction of 53 percent in the incidence of diarrhea. It also showed that two years after the project ended, mothers participating in the program still maintained a physical place in the home for handwashing with soap.

14 School and community component of HWI in Peru.

**FIGURE 1. IMPACT OF HYGIENE PROMOTION PROGRAMS ON HEALTH**



### Integrating Behavior Change in Peru

One behavior change methodology developed in Peru (2007) consists of a process of research-based communication designed and tested to reach specific audiences over time. Sustainability is enhanced through securing commitments and resources from public and private institutions; integrating the approach and methodologies into ongoing programs, with the common objective of reducing malnutrition among children; and generating policies in an effort to scale up and widen the scope of the process. In Peru, this methodology has been incorporated into the environmental education curricula by the Ministry of Education since 2010.

The Global Scaling Up Handwashing Project, funded by the Bill & Melinda Gates Foundation, has provided the opportunity to design, evaluate, and validate different approaches to project design in four countries: Peru, Senegal, Tanzania, and Vietnam. The global program is launching an web based toolkit, to be launched in 2011, called **“How to Design and Develop a HWWS Behavior Change**

**Program”** so that lessons and tools can be shared with any manager who seeks such information.

### Cost-Effectiveness of Hygiene Promotion Programs

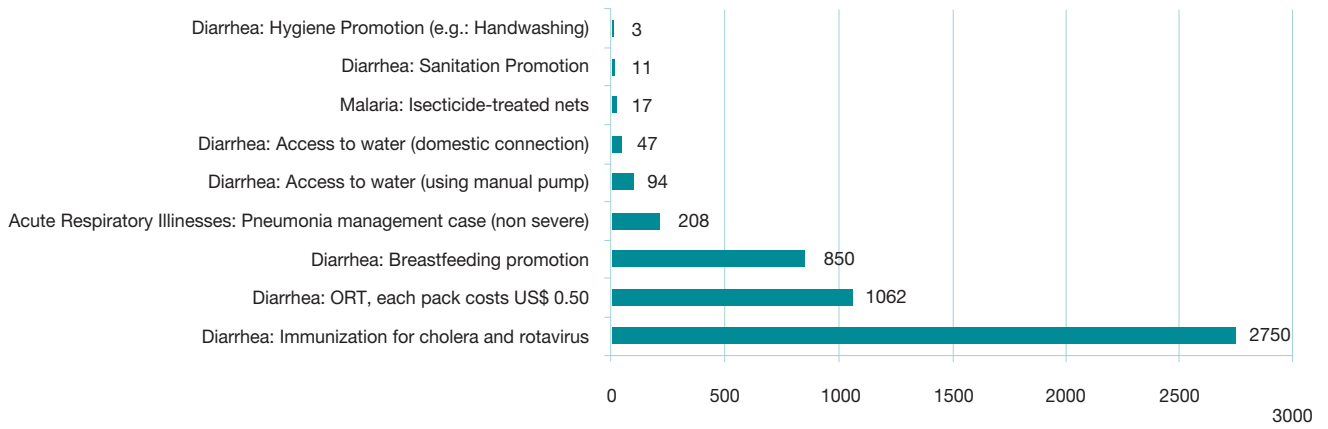
Strategic communication programs have been shown to be among the most cost-effective methods of effecting hygiene behavior change when compared with other health interventions. However, measuring the cost effectiveness of hygiene promotion programs can be difficult as data is hard to obtain. Typically, results are measured through disability-adjusted life years (DALYs), a measure of a life lost due to premature death, illness, or injuries and weighted by severity and duration. Cost-effectiveness compares the cost with the quality of the process, direct results, sustained results, and, sometimes, the impact.<sup>15</sup> In this regard, hygiene promotion is considered to be more cost-effective at US\$ 3 DALY than other health interventions, including efforts to improve sanitation (US\$ 11 DALY), an increase in the water supply (US\$ 94 DALY), treatment of diarrhea with oral rehydration therapy (US\$ 1,062 DALY), or childhood immunizations for cholera or rotavirus (US\$ 2,750 DALY) .<sup>16</sup> (See Figure 2).

15 Well Resource Center. The Value of Hygiene Promotion: Cost-Effectiveness Analysis of Hygiene Promotion Interventions, 2003.

16 Second Edition of Disease Control Priorities in Developing Countries, World Bank 2006.



**FIGURE 2. COST-EFFECTIVENESS OF HEALTH IMPROVEMENT INTERVENTIONS (COST PER DALY, IN US DOLLARS)**



Source: Disease Control Priorities in Developing Countries. Second Edition. World Bank (2006).

# IV. Lessons learned from experiences in the field

In this report, three case studies are highlighted that show WSP’s contribution to the design of hygiene components in World Bank projects. The case studies provide insight into the process of introducing hygiene promotion in different areas of collaboration, the definition of sector roles, the level of effort required to incorporate hygiene promotion, and the approximate costs involved.

Even when results obtained from each project vary, successful collaboration is mutually beneficial as value is added to project design and implementation of Bank projects, which enhance the sustainability of behavior change among the targeted beneficiaries. Such exchange also provides WSP with an opportunity to identify new areas to be further assessed and studied. These case studies are highlighted because they illustrate the diverse possibilities for integrating a hygiene component into World Bank projects as well as the various levels of support WSP can offer. The result or added value may not be perceived necessarily in a specific product or component, but rather the knowledge shared during the design phase of the project, may benefit the project as a whole.

## Case Study Summaries

### 1. Colombia: Improving Public Health Through Environmental Protection

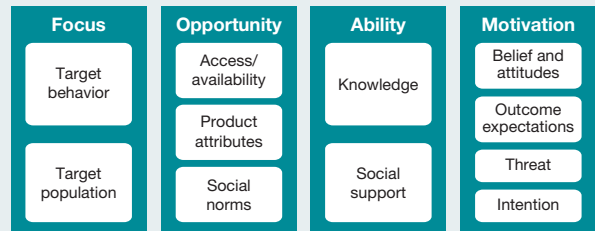
In 2004, WSP was invited to join a technical operations team to support the development of the Sustainable Development Investment Project in Colombia in response to a study showing the cost of environmental degradation and the severity of the effect of air and water pollution and other environmental challenges on the health of poor children.

This technical team was responsible for assisting the Ministry of Environment, Housing and Territorial Development (MAVDT) target problems related to inadequate water supply and hygiene, and WSP’s role was to provide support in developing the handwashing component designed with

the objective to reduce diarrheal disease. The Handwashing component was geared toward mothers and children under the age of five. As a first step in developing the program, public-private partnerships were established to help leverage the private sector’s knowledge of the soap market and consumer preferences, as well as to define the scope of the hygiene intervention. A prior assessment provided insight into the opportunities for and challenges to partnership building.

#### A Framework for Handwashing

In 2007, WSP developed FOAM, a framework to analyze the determinants of behavior related to handwashing with soap. Focus such as access to soap and water, beliefs regarding the practice or the cause of diarrhea among children, or knowledge about when and how to perform the practice.



FOAM stands for (1) Focus: Who is the audience and what behavior do we want them to adopt? (2) Opportunity: Is the target audience able to carry out the behavior? (3) Ability: Is the target audience capable of carrying out the behavior? (4) Motivation: Does the target audience want to adopt the behavior?

This framework is used to guide behavioral research and monitoring efforts. Based on this evidence, communication strategies are designed to better target audiences for the adoption of new behaviors. Monitoring also benefits from this approach as the process is measured on the basis of the determinants that trigger behavioral change.

Source: Global Scaling up Handwashing Project - A Handwashing Behavioral Change Journey, WSP Learning Note: Peru, August 2010.

An effort to raise awareness among policy makers and stakeholders was carried out in the early stages to evaluate the need for and cost effectiveness of a behavioral change approach to reducing diarrheal disease. Three studies were implemented: an assessment to evaluate the sustainability of the potential partnerships needed to support the project and also to commit resources; a market study to learn about consumer preferences regarding various types of soap and purchasing habits; and formative research to determine a baseline for diarrheal disease and behavioral practices in the country.

A coordinator was selected and support was provided to develop an action plan, timetable, and a communications strategy based on the research undertaken. Support was provided to the coordinator and Ministry team by sharing terms of reference (TOR), training and promotional material. A field trip was organized for the Handwashing Coordinator to visit Peru and learn firsthand about the process in different sites in the country. The project allocated a budget of US\$ 1 million for the handwashing component.

#### *Lessons Learned:*

- Timing: there was an explicit decision made by the project leader in the early stages of project preparation to include a handwashing (HW) component. This provided an opportunity to ensure that the component would foster efficient use of resources by the client.
  - The Public-Private Partnership for Handwashing with Soap (PPPHW) at the global level and in Peru provided a concrete approach and tools that could benefit the Colombian Sustainable Development Investment Project and which could be applied immediately. These tools included a Public-Private Partnership (PPP) assessment; TOR for behavioral research, capacity-building modules and monitoring tools; and TOR for an HW coordinator with experience in partnership building and marketing.
  - Design of the handwashing component was based on an assessment and market research to determine the enabling environment for building a national public-private partnership to expand resources and reach, among other objectives.
- The approach was based on research-based communication and capacity building, which was undertaken at a later stage.

## **2. Peru: Implementing Hygiene Promotion Programs Through Health and Nutrition Services—Support for a Human Development Project**

Chronic malnutrition is one of Peru's most serious human development problems and affects nearly half a million children. A World Bank Social Protection Project was prepared in 2010 with the purpose of strengthening the impact on nutrition of the conditional cash transfer (CCT) program *Juntos*. Like similar programs in the region, *Juntos* provides financial incentives for poor families to take children to school and to health service centers. It is now considered one of the country's most effective social programs. The World Bank project will support both the strengthening of the operation of the CCT and the supply of health and nutrition services, as well as enhance the effectiveness of community-based education sessions.

WSP provided support and technical assistance from the early stages of project design as well as throughout the appraisal and project appraisal document PAD drafting processes. It also provided support to developing a capacity-building component and determining responsibility for participation in the community-based education sessions, as well as sharing field information regarding the *Juntos* operational conditions.

Technical assistance was sought from WSP to share lessons and knowledge related to capacity building at the local level and monitoring and impact evaluation, as well as to provide an assessment of the opportunities to develop creative monitoring technologies to better trace the process in distant localities using cellular phone technology. Support was provided at the national level by working with *Juntos* teams to discuss monitoring design and the contents of the program's conditionalities. At the regional level, the Handwashing Initiative (HWI) provided feedback on the activities under way and the results. *Juntos* promoters were trained and delivered messages to audiences.

*Lessons Learned:*

- The collaboration between WSP and the World Bank was clearly mutually beneficial. Integrated work opened the door to *Juntos* at the national level for the teams involved in the HWI, while the HWI intervention provided relevant field lessons that helped build the World Bank Social Protection team's knowledge base.
- The use of behavioral change methodologies created as part of the HWI within the *Juntos* program resulted in the development of spontaneous conditionalities at the regional level. Mothers were asked to participate in handwashing training sessions as a condition for receiving the cash. Field reports were provided to the project team to complement or support policy design.

### 3. Peru: Reducing the Impact of Environmental Damage on Health

The World Bank Lima Water Rehabilitation and Management Project aimed to improve water supply and sanitation networks; promote water conservation; expand services to the urban poor; and strengthen the Lima Water and Sewerage Company's (SEDAPAL) institutional capacity.

As part of an effort to expand coverage, a hygiene promotion program was included and WSP was asked to assess the hygiene habits of people who lacked running water or proper sanitation in order to develop educational materials relevant to the local culture and conditions. The study applied an epidemiological approach in order to identify factors that act as barriers to water and food contamination, and a social-anthropological approach to understand the beliefs of the population. The study was conducted under the Coverage Expansion Project (*Programa de Ampliación de Cobertura* or PAC in Spanish) and implemented by SEDAPAL in cooperation with the World Bank, through WSP.

In order to gather information, the approach involved quantitative, qualitative, descriptive, exploratory, transversal, and representative analysis. It also included data analysis and a market study to learn about consumers' preferences

in branded soap and their purchasing and hygiene-related habits, as well as formative research financed by WSP and implemented by the Association for rural educative services, Peruvian NGO (SER by its Spanish abbreviation) to help design a Health Education Strategy and an implementation plan that included a communication strategy.

WSP also provided the methodologies and manuals for capacity building at the local level. A workshop was organized to "train the trainers" who were then qualified to train citizens in the intervention areas. Trained community agents also received the tools to reach and motivate behavioral change among women and their families. The involvement of the beneficiaries during the design and implementation phases—through the formation of Water and Sanitation Committees (WSC), as well as through workshops organized by social promoters—was a key feature in the development of this system, which helped to empower the beneficiaries and to sustain adequate operation and maintenance of the program.

*Lessons Learned:*

- By design, this project promoted the condominium approach to sanitation in which the community role was substantial. Hygiene promotion is a top priority, and the methodology and manuals developed by the HWI represented an opportunity for immediate action to support the SEDAPAL Coverage Expansion Project. Forty facilitators were trained and received manuals and promotional material to support their efforts.
- Impact evaluation showed that as a result of the program, diarrhea incidence among the population in two intervention areas was lower (9 percent and 8 percent) than in two areas of non-intervention (16 percent and 15 percent).
- SEDAPAL has since integrated lessons learned from this project within the institution. A "Social Unit" was developed to design and monitor behavioral change/capacity building components to support investments in infrastructure and maintenance.

## V. Recommendations based on hygiene field projects

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Field presence and strong relationship with clients provides an opportunity for collaboration to leverage the political, institutional, and financial support needed to improve and scale up hygiene promotion programs. Technical support will add value to the development of the project and assist project leaders with assessing the enabling environment and conducting pilots in the field, as well as providing creative approaches, evidence, and validated knowledge to guide project design.

During 2010, technical support to integrate hygiene components was provided to 28 different client-led initiatives, representing an important part of the WSP portfolio.<sup>18</sup> This support included the coordination of national handwashing with soap initiatives in eight countries over the past five years. These efforts have resulted in a growing body of skills and knowledge related to designing, facilitating, implementing, monitoring, and evaluating large-scale behavior change programs.<sup>19</sup> (See Table 1: Tools and Tips).

New approaches have been developed to mainstream hygiene promotion within other sectoral programs by looking at scale, sustainability, evidence, and systematic strategic learning on what works and what does not. The integration of hygiene promotion programs across several sectors helps strengthen each program as they all build upon each other. Some areas of cross-cutting support that can be provided by WSP include the following:

- Policy design support to national and local governments;
- Technical and operational assistance in areas such as program design, capacity building for behavioral change promotion, monitoring and evaluation, and assessment of the enabling environment;
- Partnership building skills such as mediation, negotiation, joint operational planning, and monitoring of commitments; and
- Knowledge management and research design and implementation.

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<sup>18</sup> WSP. Hygiene Strategy 2010.

<sup>19</sup> Water and Sanitation Program: Medium-Term Strategic Framework on Hygiene FY 2010-2014 (DRAFT).

**TABLE 1. TOOLS AND TIPS BASED ON HYGIENE PROJECTS IN THE FIELD (2002-2010)**

Areas of Technical Support	Purpose	Highlights	Timing/process	Cases/research/learning
Enabling environment assessment (EEA)	This assessment is designed to provide information regarding the pre existent factors that could enable or hinder project's sustainability in a given area – national or local. The information can be crucial to the success of the project and therefore will influence or guide project design. It will also provide parameters for monitoring.	All though the dimensions of the assessment depend greatly on the project objectives, a well designed enabling environment assessment can provide relevant information such as: <ul style="list-style-type: none"> <li>- Existing policy</li> <li>- Additional funding sources</li> <li>- Potential partners</li> <li>- Local capacities</li> </ul>	<ul style="list-style-type: none"> <li>• Early stages, best if previous to project design.</li> <li>• A thorough national scope enabling environment assessment will take approximately 2 to 3 months: 2 weeks preparation and coordination; 3 to 4 weeks field work; and about 3 weeks for analysis and write up.</li> </ul>	<b>Colombia:</b> in this case the Handwashing component was part of much wider environmental program financed by the World Bank to be housed at the Ministry of Environment and Territorial Expansion. As such, the need to explore private sector participation was needed and an assessment was implemented to meet this specific demand. The Association of Private Industries (ANDI) provided support and opened the doors to all sectors. Representatives of Private Foundations, Soap and Communication firms were interviewed. A map of potential partnerships was developed based on this assessment which guided the scope of the component.
Behavior research	Behavioral change is about knowing the factors that trigger and motivate a certain audience to adopt a new habit. A well designed behavioral research will provide insight into these influencers of human behavior and how they may vary according to culture, language, geographic conditions in a particular target group. Findings will guide communication strategy design.	FOAM (Focus on Opportunity, Ability, and Motivation) is a framework designed by WSP to help in the development, monitoring, and evaluation of handwashing behavior change programs. FOAM was developed for use in resource-poor settings, but it can also be adapted for other socioeconomic environments.	<ul style="list-style-type: none"> <li>• Research design, terms of reference and consultant selection needs to be closely guided by a specialist in the field of behavior change/ social marketing.</li> <li>• Time and cost factors will depend on the scope of the design.</li> </ul>	The Handwashing Scaling Up projects in <b>Peru, Vietnam, Senegal and Tanzania</b> , have FOAM in the design of behavioral research and in the monitoring of implementation since 2008, when it was developed.  The tool used to monitor the process of behavioral change in Peru, was an Intercept Study at the market place (2009 and 2010).

**TABLE 1. TOOLS AND TIPS BASED ON HYGIENE PROJECTS IN THE FIELD (2002-2010) CONTINUED**

Areas of Technical Support	Purpose	Highlights	Timing/process	Cases/research/learning
Integration within public programs	One of the sources of sustainability is to integrate project lessons and tools into ongoing national programs. The hypothesis rests on the idea that the added value a project may provide to a country program will benefit such program after the program is concluded.	<ul style="list-style-type: none"> <li>• Experience shows that the link with the public sector institution has to be established from early stages of project implementation to make sure their demand is met.</li> <li>• Evidence is relevant source of trust that will result in country's endorsement of the methodologies and lessons gathered from the project.</li> </ul>	<ul style="list-style-type: none"> <li>• The process of integration entails an important level of effort and time allocated to a process that may or may not result in a successful achievement that lies out of the area of control of a project manager.</li> </ul>	<ul style="list-style-type: none"> <li>• A challenge found when trying to integrate a behavioral change component within a Water &amp; Sanitation project/loan is that investments in infrastructure have a specific period, a beginning and an end, while a behavioral change process doesn't; it expands over a long period of time. The sustainability factor for infrastructure should be analyzed further to evaluate the benefits that integrating a behavioral change component would bring to such an investment.</li> </ul>
Partnership building	Bringing public, private and community organizations together to strengthen a process by adding diverse knowledge and resources to widen the benefit to the poorest.	<ul style="list-style-type: none"> <li>• The public sector benefits from the knowledge and resources of the private sector in the approach to target audiences for effective communications efforts.</li> <li>• At local level, the need to partner and join efforts is obvious – institutions need each other to improve each other's performance.</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen the communication among institutions, specially for those who are culturally diverse. Once the partnership is established, is essential to define clearly the roles and responsibilities of each institution.</li> </ul>	<ul style="list-style-type: none"> <li>• Hindustan Lever's brand Lifebuoy, funds the single largest private rural health and hygiene educational program in <b>India</b>. Focused on rural communities, the program seeks to educate children and their families.</li> <li>• In <b>Peru</b>, agricultural and mining companies have integrated hygiene promotion components into their community outreach programs as part of their social responsibility strategies.</li> <li>• In <b>Colombia, Indonesia</b> and <b>Peru</b>, mass media communication firms have funded air time and widen the scope of audience reach.</li> </ul>

**TABLE 1. TOOLS AND TIPS BASED ON HYGIENE PROJECTS IN THE FIELD (2002-2010) CONTINUED**

Areas of Technical Support	Purpose	Highlights	Timing/process	Cases/research/learning
Creating enabling technologies	Handwashing and soap devices or stations have been designed in many countries to provide an answer to local demands. It is common knowledge that their presence acts as a reminder to promote adoption of the behavior.	<ul style="list-style-type: none"> <li>• Tippy-taps and similar devices serve the purpose of providing water and soap to be ready to use by the latrine/ bathroom and in the kitchen.</li> <li>• Homemade liquid soap (made out of a piece of laundry soap bar) provides an economic resource of soap for handwashing.</li> <li>• In general sense, it provides a concrete solution that it is best when kept simple and accessible to low income families.</li> </ul>	<ul style="list-style-type: none"> <li>• Once the prototype is produced, a market testing period must follow. In Peru this process and the analysis of observations and findings took 8 months.</li> </ul>	<ul style="list-style-type: none"> <li>• Access to a convenient handwashing station has been associated with higher rates of handwashing, according to Adams Biram,s “Formative research for hygiene promotion in Kyrgyzstan”. (2005)</li> <li>• Recent findings in <b>Peru</b> indicate that families that use HWWs devices at home also engage in hygiene practices throughout the household.</li> <li>• Savings (60%) was critical in the general acceptance of the liquid soap device in <b>Peru</b>.</li> <li>• Research in <b>Vietnam</b> found that designing a handwashing station must take user preferences and practices into account, thus a universal model may not be recommended.</li> </ul>
Methodologies developed for local capacity building	One of the main channels of communication is provided by trained agents that engage in interpersonal communication with audiences and support the behavioral change process. Main areas of capacity building are: communication for behavioral change and monitoring.	<ul style="list-style-type: none"> <li>• Methodologies and tools have been developed with the public sector to ensure that they provide added value to community agents to increase efficiency and enhance results.</li> <li>• There is active interest in obtaining training and tools among community agents if they will enhance results and recognition.</li> </ul>	<ul style="list-style-type: none"> <li>• This is a lengthy process that is based on research. Once the methodology is designed it should be endorsed by the client, therefore it must be reviewed by technical teams of the Ministries involved to assure that contents agree with current policies. Publication should only happen after their approval.</li> </ul>	<ul style="list-style-type: none"> <li>• Locally, capacity building workshops and tools are welcomed by authorities and promoters. They represent an incentive.</li> </ul>



### Tips for project leaders on Integrating Hygiene Promotion Programs into World Bank Projects

- Start early in the project cycle to gauge the Government's commitment and current enabling environment for hygiene promotion.
- Make use of the opportunities for a multisectoral approach to institutional collaboration and coordination within a country to help advance and scale up hygiene promotion initiatives.
- Rely on teams of specialists that can provide technical assistance and existing resources such as World Bank's Water and Sanitation Program, Unicef, WHO, and other NGOs or Trust Funds.
- Work with various agencies to have joint planning sessions to determine how they can complement each other and leverage existing activities.
- Help agencies carve out distinct and complementary domains within the context of the project to help incentivize and build ownership.
- It is difficult to determine the cost of a hygiene promotion program that focuses on behavior change. The World Bank report Behavior Change Communication for Better Health Outcomes in Africa states that "behavior change communication (BCC) costs were about eight percent of total costs, where

data was recorded," and that for Implementation Completion Reports (ICR) that contained cost data, average actual expenditure on BCC was US\$ 1.82 million.<sup>20</sup>

- There are many global organizations that support hygiene promotion programs such as the Center for Disease Control (CDC), UNICEF, USAID, WATERAID, WHO, the Water Supply and Sanitation Collaborative Council (UN), GIZ, and the Swiss Development Agency.

### Timeline for Integrating a Hygiene Promotion Program into the World Bank's Project Cycle

Each of the key steps in assessing, designing, and implementing a hygiene promotion program requires a series of tasks at different stages of the project cycle. Although the timing of tasks will vary, there are key steps that should be taken early in the project identification stage and continued through to supervision.

The timeline depicted in Table 2 is indicative rather than prescriptive. An assessment of the enabling environment will help the project leader determine the level of funding, training, and research required, the tasks that may need to be outsourced, and the existing capacity for the implementation of specific aspects of the hygiene promotion program.

<sup>20</sup> Elmendorf, E. et al., Behavior Change Communication for Better Health Outcomes in Africa, The World Bank, 2005.

**TABLE 2. GUIDELINES FOR INTEGRATING A HYGIENE PROMOTION PROGRAM INTO THE WORLD BANK PROJECT CYCLE**

World Bank Project Phase	Activity	Objectives	Notes	Project Team	Estimated Duration
Preparation	Concept Note PAD	Describe and outline hygiene promotion component or approach	Revision of purpose and objectives of the proposal Discussion of thematic areas of cross-cutting support Awareness of expectations among teams	Evaluate options and provide available information, share lessons to clarify expectations of requested support	Initial months of preparation
	Advocacy	Build awareness of benefits of hygiene behavior benefits among clients and key stakeholders	Relevance of hygiene component may need to be justified with a focus on results and cost-effectiveness Authorities may need to be convinced of benefits	Design advocacy strategy—provide support and follow-up in the process of generating buy-in	Throughout the project cycle
	Impact evaluation and health indicators	Provide information on the incidence of diarrhea among children and changes over the course of the project	Depending on the availability of funding, the project may be designed based on an impact evaluation approach Baseline, longitudinal, and end line studies are recommended to measure change accurately	Provide support in the design of impact evaluation, monitoring of systems, and project evaluation	During the project cycle, before implementation starts
	Behavioral research	Identify determinants of behavior change among target audience	Results will be evaluated according to FOAM framework to guide design of the communication strategy	Support research design and results evaluation	Approximately three months
	Enabling environment assessment	Learn about the potential for sustainability of the project as a whole	This research is required in order to identify potential opportunities and challenges and guide project design with a focus on sustainability Six-month or annual monitoring of progress is recommended The EEA tool known as “spider” has nine dimensions, but may be adapted	Provide technical assistance in the design of study Provide support with: • TOR design • Consultant selection • Monitoring and supervision • Evaluating results and recommending changes	Initially in order to influence project design Occasional monitoring to evaluate the process
	Project design	Design project or component based on research conducted	Based on research findings, the project will be designed or adapted with the participation of the sector involved	Provide technical assistance on research-based communication strategy and a validated approach to behavior change	Six months to a year

**TABLE 2. GUIDELINES FOR INTEGRATING A HYGIENE PROMOTION PROGRAM INTO THE WORLD BANK PROJECT CYCLE**  
CONTINUED

World Bank Project Phase	Activity	Objectives	Notes	Project Team	Estimated Duration
Implementation	Policy building	Enhance sustainability and scaling up of the project	Once an ad hoc policy is generated, it implies that the client has ownership and will assign resources for the continuity of the project or program  It is critical to pursue this result and provide support along the way	Provide case examples, lessons, and technical assistance in this process	Throughout the project cycle
	Capacity building	Enhance client/stakeholder capacity to continue activities	Clients and stakeholders at the national and local levels most frequently demand capacity building in the areas of communication for behavior change, monitoring methodologies, and impact evaluation	Provide technical assistance in the design of capacity building workshops and tool design for trained agents/professionals to carry out field activities	Throughout the project cycle
	Partnership building	Align resources to ensure efficiency and achieve results	EEA provides information that feeds component/project design  Potential partners are identified; synergies are studied	Design partnership building strategy, prioritize potential partner institutions by their strengths and areas of synergy  Provided technical assistance to operator engaged in the process	Throughout the project cycle
	Knowledge management	Capture lessons and share results to enhance scaling up	Reports and publications created to share lessons are documented throughout the process	Provide support to design and technical assistance in the process of developing products	From mid-project cycle
Supervision	Evaluation of reports	Evaluate the process and improve implementation	WSP will join the TTL's team to provide support throughout the life of the project	Work with the Bank team to monitor the process and evaluate results	Throughout the project cycle

# Conclusion

This guide has been created to provide practical tools, tips, and methodologies for project leaders to integrate hygiene components into their projects. It builds on available evidence about the contribution of behavioral change programs to the reduction of diseases, in particular handwashing with soap initiatives, which can benefit health, environment, water, sanitation, and education projects.

Project leaders should view hygiene promotion as a behavioral change process rather than a unidirectional media or education campaign. The knowledge generated from the research, enabling environment assessments, and other tools can be utilized in the early stages of project design and throughout the project cycle. It is crucial to understand the local environment to ensure that behavior change is sustainable once the project cycle is complete.

Awareness of the importance of hygiene will vary in each region; therefore, every project must start with different assumptions. For example, in most Latin American countries, research has shown that many citizens are aware of the importance of hygiene promotion, nevertheless, they do not adopt hygiene habits, new research will provide insight into the reasons behind it. In some countries in Africa there is less research available, and cultures and habits vary more significantly from region to region and country to country.

WSP and other partners continue to generate positive examples and lessons learned and transfer knowledge. For example, the Global Public-Private Partnership for Handwashing with Soap helps countries close the gap as they strive to meet the Millennium Development Goals.

The tools and guidelines referenced in this document do not offer a strict formula, however, and should be revised and adapted to the needs of each project. The door remains open for continuous learning and improvement.

# Abbreviations

<b>AND</b>	Association of Private Industries (Colombia)
<b>ARI</b>	Acute respiratory infections
<b>BCC</b>	Behavior change communication
<b>CBO</b>	Community-based organization
<b>CCT</b>	Conditional cash transfer
<b>CDC</b>	Center for Disease Control
<b>DALY</b>	Disability-adjusted life year
<b>FOAM</b>	Focus Opportunity Ability Motivation
<b>GIZ</b>	German International Cooperation [ <i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i> ]
<b>HDN</b>	Human Development Network
<b>HW</b>	Handwashing
<b>HWI</b>	Handwashing Initiative
<b>HWWS</b>	Handwashing with soap
<b>ICR</b>	Implementation Completion Report
<b>MDG UN</b>	Summit on the Millennium Development Goals
<b>MOU</b>	Memorandum of Understanding
<b>NGO</b>	Non-governmental organization
<b>ORT</b>	Oral Rehydration Treatment
<b>PAC</b>	Coverage Expansion Program (PAC by its Spanish abbreviation)
<b>PAD</b>	Project Appraisal Document
<b>PPP</b>	Public-private partnership
<b>PPPHW</b>	Public-Private Partnership for Handwashing with Soap
<b>SEDAPAL</b>	Lima's Water and Sewerage Company (Peru)
<b>SER</b>	Association for rural educative services, Peruvian NGO (SER by its Spanish abbreviation)
<b>TAL</b>	Technical assistance loan
<b>TOR</b>	Terms of reference
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>WSC</b>	Water and Sanitation Committee
<b>WHO</b>	World Health Organization
<b>WSP</b>	Water and Sanitation Program

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