The Story of a Successful Public-Private Partnership in Central America

Handwashing for Diarrheal Disease Prevention

Authors

Camille Saadé

Massee Bateman

Diane B. Bendahmane

BASICS II

EHP ENVIRONMENTAL HEALTH PROJECT

unicef United Nations Children's Fund

The Story of a Successful Public-Private Partnership in Central America

Handwashing for Diarrheal Disease Prevention

Authors

Camille Saadé

Massee Bateman

Diane B. Bendahmane

BASICS II

unicef
United Nations Children's Fund

The World Bank Group

Recommended Citation

Camille Saadé, Massee Bateman, Diane B. Bendahmane. *The Story of a Successful Public-Private Partnership in Central America: Handwashing for Diarrheal Disease Prevention.* Published by the Basic Support for Child Survival Project (BASICS II), the Environmental Health Project, the United Nations Children's Fund, the United States Agency for International Development, and The World Bank. Arlington, Virginia, September 2001.

Credit

Photo credits are as follows: Cover photo, page 47, Servicios Estrategicos; page 1, UNICEF/90-0008/ Ellen Tolmie; page 9, UNICEF/94-0948/Nicole Toutounji; page 15, Camille Saadé; pages 21, 29, 35, 55, Colgate Palmolive; page 67, UNICEF/Mainichi/Shinichi Asabe

About the Publishers

This document was supported by Basic Support for Institutionalizing Child Survival (BASICS II), the Environmental Health Project (EHP), The United Nations Children's Fund (UNICEF), and The World Bank. BASICS II and EHP are sponsored by the U.S. Agency for International Development, Bureau for Global Programs, Office of Health and Nutrition. BASICS II is conducted under the terms of Contract No. HRN-C-00-99-00007-00 by the Partnership for Child Health Care, Inc. Partners are the Academy for Educational Development, John Snow, Inc., and Management Sciences for Health. EHP is conducted under the terms of Contract No. HRN-I-00-99-00011-00 by Camp Dresser & McKee International Inc. and a consortium of specialized subcontractors.

The views in this report are entirely those of the authors and do not necessarily reflect those of USAID, UNICEF, or the World Bank. This document may be reproduced if credit is properly given.

Office of Health and Nutrition
Center for Population, Health, and Nutrition
Bureau for Global Programs, Field Support, and Research
Website: http://www.usaid.gov/pop_health/

BASICS II
1600 Wilson Boulevard, Suite 300
Arlington, Virginia 22209 USA
Tel: 703-312-6800
Fax: 703-312-6900
E-mail address: infoctr@basics.org
Website: www.basics.org

unicef
United Nations Children's Fund
3 United Nations Plaza
New York, NY 10017 USA
Tel: 212-326-7000
Fax: 212-303-7985
E-mail address: pubdoc@unicef.org
Website: www.unicef.org

EHP
1611 N. Kent Street, Suite 300
Arlington, Virginia 22209 USA
Tel: 703-247-8730
Fax: 703-243-9004
E-mail: info@ehproject.org
Website: www.ehproject.org

The World Bank Group
1818 H Street, NW
Washington, DC 20433 USA
Tel: 202-477-1234
Fax: 202-477-6391
E-mail address: books@worldbank.org
Website: www.worldbank.org

Table of Contents

Acknowledgments vii

Acronyms ix

Executive Summary xi

Chapter I

Introduction: The Story of a Successful Public-Private Partnership 1
- The Concept 2
- The "Nautilus": An Approach to Public-Private Partnerships 3
- A Promising Opportunity 6
- The Handwashing Initiative in a Nutshell 6
- Overview of the Document 8

Chapter 2

The Public Health Goal: Saving the Lives of Children 9
- Diarrhea Morbidity and Mortality in Central America 10
- The Burden of Diarrheal Disease 10
- Handwashing and Diarrhea Prevention 10
- Handwashing Not Commonly Practiced 11
- Private Sector Potential 12

Chapter 3

The Catalyst: Bringing the Partners Together 15
- BASICS Prepares to Play the Role of Catalyst 16
- Roles and Responsibilities 16
- Activities 17
  - Phase One: Conceptualizing the Initiative 17
  - Phase Two: Planning and Development 17
  - Phase Three: Implementation 19
  - Phase Four: Assessment and Dissemination 19
- Issues and Lessons Learned 20

Chapter 4

The Private Sector Partners: Merging Business and Public Health Goals 21
- Commercial and Public Health Goals 22
- Profiles of Participating Producers 22
- A Non-Exclusive Partnership 23
- Roles and Responsibilities 24
- Activities of the Private Sector Partners 25
  - Phase One: Conceptualizing the Initiative 25
  - Phase Two: Planning and Development 25
  - Phase Three: Implementation 25
  - Phase Four: Assessment and Dissemination 26
- Issues and Lessons Learned 27

Chapter 5
The Public Sector and Other Partners: Joining Hands with the Soap Producers 29
Targeted Groups 30
The Public Relations Blitz 30
Activities of the Public Sector and Other Partners 31
The Follow-up Public Relations Event 32
Issues and Lessons Learned 32

Chapter 6
Marketing Strategy Development: From Market Survey to Creative Concept 35
Consumer Research 36
Selecting the Market Research Agency 36
Designing and Testing the Questionnaire and Methodology 37
Implementing the Survey 37
Results 39
Diarrhea Prevalence and Detailed Analysis of Behaviors 39
Overall Stages of Key Behaviors 40
Key Attitudes and Constraints 42
Media Usage 42
Implications for the Soap Producers 42
Advertising Strategy Development 43
Advertising Brief 43
Selecting the Advertising Agency 43
Developing the Communication Strategy 43
The Design Concepts 44
Issues and Lessons Learned 44

Chapter 7
The Advertising Campaign: The “How” and the “When” 47
Description of the Generic Handwashing Campaign 48
Radio Spots 48
Television Spots 48
Posters 49
Strategy for Implementation 49
Campaign Activities—March 1998 to April 1999 50
Activities in Costa Rica 50
Activities in El Salvador 50
Activities in Guatemala 51
Continuing Project Activities 52
Issues and Lessons Learned 53

Chapter 8
Results: Return on Investments 55
Methods for Assessing Results 56
Follow-up Market Survey with Beneficiaries 56
Interviews with Partners 56

Results 56
Exposure to the Campaign 56
Handwashing Behavior 57
Attitudes Toward Handwashing and Soap 57
Public Health Impact in Guatemala 58
Long-term Effects 59
Other Key Findings 59
Resources Leveraged 59
Soap Producers' Evaluation of Results 61
Sustainable Change Among Partners 63
Effect on the Private Sector 63
Effect on the Public Sector and Other Partners 63
Issues and Lessons Learned 64

Chapter 9
Key Steps for Replication 67
Costs Versus Benefits 68
Key Steps for Replication 68
Issues 72
Critical Success Factors 73

Boxes
Past Experiences with Public-Private Partnerships for Child Health 3
Sample Studies of the Effectiveness of Handwashing 11
Task Force Responsibilities of the Soap Producers 24
The Public Relations Brochure 31
Advertising Slogan and Logo 43
Summary of the Handwashing Initiative Communication Strategy 44
Burbujita, the Mascot of the Handwashing Initiative 48
The Generic Poster 49
Protex Handwashing Poster: An Adaptation of the Generic Campaign 52
Protex Handwashing Promotion: A Program Targeting Schoolchildren 53
Estimates of the Health Impact of the Handwashing Initiative in Guatemala 59

Figures
Figure 1. The Nautilus 5
Figure 2. Handwashing Initiative Time Line 6
Figure 3. The Effectiveness of Interventions to Prevent Diarrhea 11
Figure 4. Diarrhea Prevalence Among Children by Handwashing Behavior Stage of Surveyed Mothers, 1996 (all four countries) 41
Figure 5. Moving Families Up the Handwashing Steps 42
Figure 6. Generic vs. Branded Campaign Expenditures in 1998 51
Figure 7. Stages of Handwashing Behavior in Guatemala, 1996 and 1999 58
Figure 8. Diarrhea Prevalence Among Children by Handwashing Behavior Stage of Surveyed Mothers in Guatemala, 1996 and 1999 58

Tables

Table 1. Socioeconomic Targeting of Soaps 22
Table 2. Products and Markets of Participating Producers 23
Table 3. Campaign Activities of Participating Producers 26
Table 4. Contributions of Public Sector and Other Partners 33
Table 5. Framework for the Market Survey 36
Table 6. Focus of the Market Survey 38
Table 7. Observed Handwashing Technique: Percentage of Caretakers with Good Reported Practices and Strength of Association with Lack of Diarrhea in Children under Five in the Household, 1996 39
Table 8. Handwashing Occasions: Percentage of Caretakers with Good Reported Practices and Strength of Association with Lack of Diarrhea in Children under Five in the Household, 1996 39
Table 9. Handwashing Place: Percentage with the Necessary Elements Present at the Usual Place of Handwashing in the Household and Strength of Association with Reduced Prevalence of Diarrhea among Children under Five in the Household, 1996 40
Table 10. Percentage of those Possessing and Using Soap, Guatemala, 1996 40
Table 11. Handwashing Behavior Stage of Surveyed Mothers, 1996 (all four countries) 42
Table 12. Exposure to the “Lavo Mis Manos por Salud” Campaign 57
Table 13. Catalyst Expenditures, 1996-1999 60
Table 14. Leveraged Resources, 1998-1999 60
Table 15. Costs and Benefits for Partners in the Handwashing Initiative 69
Table 16. Key Steps for Replication 70

Annexes

Annex A. The Convenio 75
Annex B. Persons Interviewed 81
Annex C. Statistical Calculations for Estimates of the Health Impact of the Handwashing Initiative in Guatemala 83

Acknowledgments

The authors gratefully acknowledge the contributions of the partners in the Initiative and those who further contributed to the documentation of our experience. Documenting the partnership was itself a partnership among UNICEF, the World Bank, and two USAID Projects—EHP and BASICS II.

We wish to express our appreciation first for the individuals who embraced our approach to building public-private partnerships and who were willing to commit their time and resources to document it and allow its dissemination to a wider audience: Rita Klees, Jennifer Sara, and Joana Godinho from The World Bank and Lizette Burgers and Vanessa Tobin from UNICEF. Both organizations provided support that made this publication possible. We also benefited from the thoughtful reviews and technical comments of a wide spectrum of colleagues, including the above-mentioned colleagues from the World Bank and UNICEF, Hans Spruijt from UNICEF/Nepal, Paul Ickx and Renata Seidel from BASICS II, Lisa Nichols and Frances Tain from EHP, and Valerie Curtis from the London School of Hygiene and Tropical Medicine.

Special thanks go to Karen Steele, who conducted post-intervention interviews with key players in the Handwashing Initiative from the public, private, donor, and NGO sectors.

We are especially grateful to Frances Tain at EHP who cheerfully managed the whole documentation process, coordinated the planning among the four organizations, and kept the authors on schedule.

A warm thank you to our BASICS II colleagues Kathleen Shears, for her patient copy editing, and Kathy Strauss, for layout and design.

Finally, we thank all the partners in the Central American Handwashing Initiative who created together and contributed to the experience reported here. The individuals involved are too numerous to mention, so we will simply thank their organizations for participating and continuing to use the Initiative as a model: Colgate-Palmolive, FUNDAZUCAR, La Prensa Libre, La Popular/PROFISA, the ministries of education in Costa Rica and El Salvador, the ministries of health in Costa Rica, El Salvador, and Guatemala, NGOs and PVOs such as CARE and World Vision, the Office of the First Lady of Costa Rica, Punto Rojo, TCS, Teletica, television channels 3,7,11, and 13 in Guatemala, Unisola/Unilever, and USAID and its missions in El Salvador, Costa Rica, and Honduras.

About the Authors

Camille Saadé

Camille Saadé is the public-private partnership coordinator at the Academy for Educational Development (AED), who works with the BASICS II and NetMark projects. Mr. Saadé has developed and led the implementation of a methodology for mobilizing the commercial sector in mutually beneficial partnerships for sustainable interventions, such as the prevention of malnutrition, malaria and childhood illness, promotion of health-enhancing behaviors, hygiene education, and increasing the supply and demand for appropriate treatments.

Prior to joining AED, Mr. Saadé spent 20 years working in the pharmaceutical industry in different marketing and management positions in several international operations with J&J, Upjohn, and Schering-Plough.

Mr. Saadé is the co-author of the publication *Mobilizing the Commercial Sector for Public Health Objectives.* He was the editor of the former quarterly *Social Marketing Matters* and has taught a course on social marketing at Boston University since 1997.

Massee Bateman

Massee Bateman is the director of the Environmental Health Project. His career has been dedicated to environmental health,

disease prevention, and child survival issues. He has 18 years of experience in public health and medicine; 16 years in international public health; and field experience in Antigua and Barbuda, Bangladesh, Bolivia, the Dominican Republic, El Salvador, Ghana, Guatemala, Honduras, India, Indonesia, Nicaragua, Peru, Thailand, Uganda, and Zambia. Before joining EHP, Dr. Bateman held positions as child survival advisor on the USAID management team for the BASICS I child survival project, epidemiologist and acting director, Community Health Division, International Center for Diarrheal Disease Research, Bangladesh, and was the associate director for environmental health in the WASH Project in the early 1990s.

Dr. Bateman is the author or co-author of 20 some publications on hygiene behavior, water supply and sanitation, family education, acute respiratory infections, HIV/AIDS and infectious diseases, nutrition, and reproductive health. He received his degree in medicine from the University of California and later obtained a diploma in tropical medicine and hygiene from the Liverpool School of Tropical Medicine and Hygiene.

Diane B. Bendahmane

Diane B. Bendahmane is a writer and editor with extensive experience in publications on development assistance. Previously she was technical director for information services for the Environmental Health Project (1994–2000) and for its predecessor, the Water and Sanitation for Health (WASH) Project (1989–1994). She has carried out writing and editing assignments for the Inter-American Foundation, the World Bank, the United Nations Foundation, the Foreign Service Institute, Appropriate Technology International, and the Carnegie Endowment for International Peace. Her interest in development grew from her experiences as a Peace Corps volunteer (1966–68) and staff member (1969–1971) in Morocco.

Acronyms

BASICS	Basic Support for Child Survival
CARE	Cooperative for Assistance and Relief Everywhere
DHS	Demographic Health Surveys
EHP	Environmental Health Project
INE	Instituto Nacional de Estadística
MOE	Ministry of Education
MOH	Ministry of Health
NGO	nongovernmental organization
ORS	oral rehydration salts
ORT	oral rehydration therapy
PAHO	Pan American Health Organization
PRITECH	Primary Health Care Technologies (USAID project)
PVO	private voluntary organization
TCS	Telecorporación Salvadoreña
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development

Executive Summary

The Project

The Central American Handwashing Initiative aimed to reduce morbidity and mortality among children under five through a coordinated communication campaign promoting proper handwashing with soap to prevent diarrheal disease. The Initiative was conceived and facilitated by the United States Agency for International Development (USAID) through two of its projects: Basic Support for Institutionalizing Child Survival (or BASICS) and the Environmental Health Project (EHP).

The Initiative took place from 1996 to 1999. The facilitator, or "catalyst" (the two projects) contacted soap producers from five Central American countries—Guatemala, Costa Rica, El Salvador, Honduras, and Nicaragua. Four companies eventually launched handwashing promotion campaigns in 1998 in the first three countries. Ministries of health and education, media companies, UNICEF, nongovernmental organizations (NGOs), and foundations also joined the partnership. The campaign consisted of radio and television advertisements, posters and flyers distributed by sales personnel and through mobile units to communities; school, municipal, and health center programs; distribution of soap samples; promotional events; and print advertisements.

According to a follow-up assessment, ten percent of the women surveyed improved their handwashing behavior. Based on observed relationships between handwashing behavior and diarrhea in these studies and supporting scientific literature, one can also estimate that over the course of the intervention there was an overall reduction in diarrheal prevalence of about 4.5 percent among children under five. (See Chapter 8 and Annex C.)

The Concept

The effort was based on the belief that private commercial firms and public entities (principally ministries of health) would find it mutually beneficial to work in partnership to achieve complementary goals in promoting handwashing for public health. Soap companies would use new messages and methods of advertising soap designed to reach groups with low socioeconomic status in rural areas where diarrheal disease rates were high. These efforts would help each company increase sales and enhance its corporate image. The public sector would endorse the promotional campaign, assist in dissemination, and collaborate in special interventions—such as distribution of handwashing kits. The partnership would provide the public sector with new resources.

The Approach

The Handwashing Initiative followed a 14-step approach developed and used by BASICS in other public-private partnership interventions. These steps fall into four distinct phases:

- *Conceptualization.* The catalyst organization (usually a donor or NGO) identifies a public health goal that can be married with private sector objectives as the basis for a public-private partnership. It also assesses the potential market for the related product or service, tests the interest and capabilities of companies producing the product, and selects the companies to participate. The companies, in turn, conduct their own feasibility studies before deciding to participate.
- *Planning and development.* The partnership is formalized through a memorandum of understanding and formation of a task force to guide the effort. The companies develop a general marketing plan, which is later fleshed out based on market research. The research findings are used to create an advertising and communication strategy. Then the task force reaches out to involve the

public sector and other organizations (such as media companies, NGOs, donors, and foundations), and this expanded partnership plans the campaign.

- *Implementation.* The advertising campaign is launched. As it unfolds, participants monitor implementation and look for opportunities to expand and improve it.
- *Assessment and dissemination.* After a specific period of time agreed upon in advance (a year in the case of the Handwashing Initiative), an assessment is conducted using essentially the same instrument used to collect baseline data. The analysis is incorporated into the marketing strategy, and results are disseminated to guide continuation or expansion of the campaign and other efforts.

The approach varies depending on circumstances. For example, it may be more appropriate or even necessary for the catalyst to involve public sector organizations first, rather than beginning with the private companies. In the Handwashing Initiative, where no permissions or licenses—and thus no government approval—were needed, the private companies preferred to postpone the involvement of the public sector until a creative concept had been developed.

The Public Health Goal

Diarrhea is a serious disease among children in developing countries, causing an estimated 2.2 million deaths per year among those under five, contributing to malnutrition, and increasing the severity of other childhood diseases. At the time of the intervention, UNICEF's *State of the World's Children* (1995) reported that diarrhea was the cause of 45 percent of under-five mortality in Guatemala and 20 percent in El Salvador.

Handwashing has been documented as an effective means of preventing diarrhea if is it done properly at appropriate times. Reductions on the order of 35 percent may be expected (see Chapter 2). Yet in spite of its beneficial effects, handwashing is not commonly practiced or is ineffective because it is done without soap or not at the most crucial times.

The Catalyst Activities

The role of the catalyst was to bring the partners together, facilitate the work of the partnership's Task Force, finance a market survey and development of an advertising concept, and provide technical assistance in designing and implementing the campaign strategy.

In the Central American Handwashing Initiative, the catalyst made preliminary visits to soap manufacturers in the region to gauge their interest in the proposed project, brought those interested together in an organizational meeting, and facilitated the writing of a memorandum of understanding. The catalyst also formed a Task Force and called and led periodic meetings. It helped the market research and advertising firms develop a sound advertising strategy, worked with the producers in each country to enlist the support of additional partners, and maintained liaison with USAID missions in the target countries. BASICS provided expertise in marketing and EHP in research and quality control of the campaign's health-related messages.

This report is part of the catalyst's assessment and dissemination activities that began with a follow-up market survey to monitor the effects of the campaign and continued with presentations to many organizations to share the results and lessons learned. The report aims to provide enough detail about the experience in Central America for project managers to understand what might be involved in carrying out such an effort.

The Private Sector Partners

The five soap companies that joined the Initiative were La Popular and the multinational Colgate-Palmolive in Guatemala, Unisola/Unilever (another multinational) in El

Salvador, Punto Rojo in Costa Rica, and Corporación Créssida in Honduras. Four of these companies eventually launched campaigns. (The Honduran firm had to drop out at the last minute because of financial problems and the effects of Hurricane Mitch. The two Nicaraguan soap producers had expressed interest but were unable to commit to the Initiative at that time.)

Each firm assigned its marketing director or an official with similar responsibilities to the Initiative's Task Force, which met seven times and made important decisions about the development of the marketing strategy, selection of the market research firm and advertising agency, scope of the market survey, and design of the campaign. Once the creative advertising concepts had been developed, the companies joined with the catalyst in contacting ministries of health, media organizations, UNICEF, nongovernmental organizations, and others to expand the partnership. They were able to attract considerable support for the campaign.

Which soap to advertise was an issue for the producers. It was not financially feasible for any of the companies to develop a hand soap specifically for the campaign. On the other hand, those with multipurpose soaps—the *bola* used for laundry as well as personal care—did not want to limit the positioning of these products to handwashing. Those companies tended to use the basic advertisements created by the advertising agency, simply adding the logo of a brand of laundry soap. The two major multinationals, on the other hand, adapted the handwashing messages to their existing brand advertising.

The campaigns varied widely. In El Salvador, Unisola/Unilever worked with the Ministry of Health to complement and strengthen its program for Healthy Schools. In Costa Rica, Punto Rojo leveraged considerable support from the media. Teletica (the major television station), matched the producers' paid advertisements one for one. La Popular's efforts in Guatemala were highly integrated with the activities of its sales force, which distributed materials in many small towns and villages. Colgate-Palmolive initially supported the efforts of UNICEF, NGOs, and foundations and later organized a public relations event. Radio, television, and press organizations stepped forward and donated time and space for advertising.

Despite the formal conclusion of the BASICS/EHP intervention in 1999, several of the companies continued their own handwashing promotion. Colgate-Palmolive launched a school program reaching 450,000 children regionwide and is using the creative concepts of the Initiative to advertise its best-selling brand, the antibacterial hand soap "Protex." Unisola/Unilever is working with the Ministry of Health and BASICS to respond to the threat of cholera in El Salvador. And at the public relations event in April 2000, the Guatemalan Ministry of Health and commercial partners in Guatemala presented plans for continuing activities through 2003, mainly through the MOH National Plan for Healthy Schools and Municipal Health Promoters.

The Market Survey

The market survey financed by the catalyst was conducted by Generis Latina, a firm based in Guatemala. Local surveyors contacted 4,500 households in lower socioeconomic strata in the four countries and asked mothers to answer about 50 questions and give a demonstration of handwashing. Questions covered socioeconomic and household characteristics, water availability and use, handwashing, soap use, attitudes toward handwashing, and diarrheal prevalence.

Times and technique are crucial in handwashing for diarrheal disease prevention. Hands must be washed at a minimum of three critical times: (1) before cooking or preparing food, (2) before feeding a child or eating, and (3) after defecation, cleaning a baby, or changing a diaper. The three elements of proper technique are to use water and soap, rub one's hands together at least three times,

and dry them hygienically (e.g., with a clean towel or by air drying).

The survey showed that only nine percent of those surveyed were in the "optimal" handwashing group. These people demonstrated all three elements of proper technique and reported washing at all three critical times. Sixty-five percent were in the "inadequate" group. (Their technique was inadequate and/or hands were not washed at any of the critical times). The remaining 26 percent were in the "intermediate" group, reporting adequate technique but at only one or two of the critical times. Because of the importance of correct handwashing behavior, the goal of the campaign was to move more mothers out of the inadequate group and into the intermediate and optimal groups. If technique is deficient, then handwashing is ineffective, no matter how many times a day hands are "washed." The fact that there was room for improvement among 91 percent of mothers surveyed indicated that there was a wide scope for the campaign (and a significant market potential for the soap producers).

The survey also confirmed the expected association between handwashing and diarrheal disease: the better the handwashing practices of mothers, the lower the rate of reported diarrhea among children under five during the previous two weeks. Diarrhea prevalence rates were 7 percent for the optimal group, 15 percent for the intermediate group, and 21 percent for the group with inadequate handwashing practices.

The Creative Communication Concept

The catalyst hired Servicios Estrategicos, an advertising agency based in Guatemala, to develop the campaign's creative concepts based on the survey results and the Initiative's goals, and to prepare generic materials for the producers to use or adapt.

The overall concept was based on the "how" and the "when" of handwashing: the three elements of correct technique and three critical times. The theme was "Manos limpias, evitan la diarrhea" (Clean hands prevent diarrhea), and the slogan was "Lavo mis manos por salud" (I wash my hands for health). The basic approach was to present a mother as caretaker of the family and to describe or illustrate the three critical times and essential aspects of handwashing technique. The advertisements were upbeat, using popular music and actors in contexts familiar to the target population.

The Results

The market survey was repeated in Guatemala a year after the campaign had been launched, with a few additional questions about exposure to the campaign. In Costa Rica and El Salvador, smaller follow-up surveys were used mainly for tracking and to provide information for further development of the campaign.

Key Results in Guatemala

- *Handwashing behavior improved.* Ten percent of mothers moved out of the inadequate handwashing group into either the intermediate or optimal group.
- *Diarrheal disease can be postulated to have decreased.* Based on observed relationships between handwashing behavior and diarrhea in these studies and supporting scientific literature, one can estimate that over the course of the intervention there was an overall reduction in diarrheal prevalence of about 4.5 percent among children under five. (See Chapter 8 and Annex C.)

Regionwide Results

- *Catalyst activities leveraged significant resources for public health.* Together BASICS and EHP allocated approximately $389,000 to the Handwashing Initiative, which made it possible for the soap companies and other organizations to carry out promotional activities worth an estimated value of $614,900 during the first year of

the campaign. (It has not been possible to estimate contributions in subsequent years.)

- *Soap company sales increased.* Although the soap companies provided no specific information, producers implied that sales had increased in areas where project activities had taken place. Producers were hesitant to share information such as sales figures with the Task Force because the group was composed principally of their competitors.
- *Sustainable changes achieved among partners.* Private companies learned new approaches and techniques for soap promotion and about the potential for working in collaboration with the public sector, media, and donor organizations. Public sector involvement in the campaign led to increased competence of personnel in handwashing promotion, improvements in hygiene programs through the contributions of the private sector, and creation of new associations and networks.
- *Experience disseminated to other countries through the channels of multinationals.* Subsidiaries of multinationals reported the success of the intervention to their headquarters, which in turn disseminated the news to their other subsidiaries, creating opportunities for replication.

The Outstanding Issues

More experience with the public-private approach used in the Central American Handwashing Initiative may shed light on the following unresolved issues:

- *Collaboration versus an exclusive agreement.* The Initiative invited all interested soap producers to join, in the interest of equity and campaign scope. However, some producers, preferring exclusivity, were not comfortable working with their competitors. Some later claimed that they participated only "defensively," for fear of being left out. An exclusive agreement with one company might have prompted a greater effort.
- *Measuring impact.* Because it is impossible to have a control group, a project operating at the scale of the Initiative cannot measure health impact through an experimental design that allows for ironclad conclusions. The involvement of an ever-widening group of participants and more and more varied activities also presents challenges for evaluation.
- *Feasibility of handwashing intervention.* Environmental constraints, such as limited access to water or affordable soap, may threaten the feasibility of a handwashing campaign.
- *Sustainability.* It is encouraging that activities inspired by the Initiative continue. Nevertheless, the end of catalyst involvement has left a void. Time will tell whether involved firms will incorporate elements of the campaign in their soap advertisements in the long run and whether ministries of health will continue their support for the campaign.

Critical Success Factors

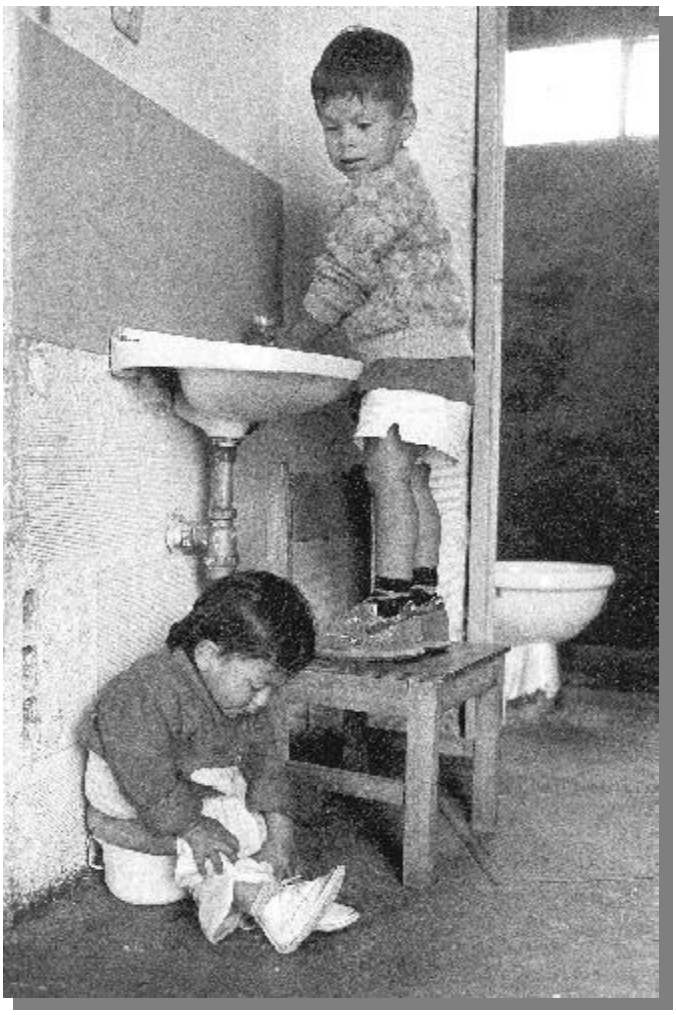
The following factors proved to be essential to the Initiative's success:

- *Presence of a catalyst.* Members of the partnership said that the public and private sectors could not have been brought together without the catalyst. In addition, the catalyst brought to the table expertise in marketing, public health, and behavioral research; financed the all-important market survey and advertising concepts; and assigned a local coordinator to monitor activities.
- *Behavioral research.* The market survey provided information that was vital to designing the advertising strategy and a baseline for measuring progress in changing behaviors and attitudes and bringing about health improvements.

- *Public health backing.* The Initiative received the enthusiastic support and endorsement of ministries of health in El Salvador and Guatemala. This support reassured the soap producers that they had made a wise decision in participating in the campaign.
- *Road map.* The catalyst used a well-defined approach to public-private partnership. This gave all partners a clear idea of the sequence of events and helped keep the Initiative on track.
- *Roles, responsibilities, expectations.* A memorandum of understanding set out the roles and responsibilities of the partners, the goals, and the expected outcomes. The document was fairly open-ended as to what resources the soap producers were to provide. A too-specific document would not have been in keeping with the voluntary nature of the Initiative.

The success of the Handwashing Initiative has been attributed to the enthusiastic support of the concept by the soap producers and the availability of flexible, timely, technical assistance to keep the project moving along. It is hoped that the experience in Central America will be replicated in other countries as a component of integrated programs to prevent diarrheal disease and that it can be used as a model for private sector involvement in other public health areas.

Introduction
The Story of a Successful Public-Private Partnership



This chapter orients the reader to the Handwashing Initiative by…

- Explaining the concept behind the Initiative.
- Reviewing the approach used to plan, implement, and assess the Initiative.
- Telling the story of the Initiative—in abridged form.
- Giving a time line of activities.
- Describing the contents of the rest of the chapters.

The Central American Handwashing Initiative was a partnership of private and public sector organizations working to promote the use of soap for handwashing to reduce diarrhea-related morbidity and mortality among children. The Initiative was based on the belief that private sector companies can positively influence consumers' health-related behaviors, while at the same time increasing their market share of key products. Private sector involvement in public health can leverage funds to reach those in need, as one component of a comprehensive public health strategy.

The effort received funding from the United States Agency for International Development (USAID) through two of its projects: BASICS (Basic Support for Institutionalizing Child Survival) and the Environmental Health Project (EHP). From 1996 to 1999, these projects served as the catalyst for the Initiative—mobilizing support from private soap companies, ministries of health and education, media organizations, donors, and nongovernmental organizations (NGOs).

This report tells the story of the Initiative, documents its successes and challenges, and offers lessons learned to guide future activities in Central America, as well as similar programs in other regions.

The Concept

Making a widespread and lasting impact on public health is a challenge for all in the international health community. In many developing countries, the number of public health problems continues to grow, while the resources available to address them become more constrained because of economic crises, changes in public and political priorities, and complex bureaucratic processes. Even when donor funding is available, recipient governments often lack the necessary infrastructure and personnel to reach at-risk populations efficiently and effectively. Overextended ministries of health may collaborate with NGOs to deliver public health-related products and services. But these NGOs, in turn, rely on limited funds for their operations.

Throughout the world, the commercial sector has managed to reach people at all socioeconomic levels with a wide array of products and services through consumer-driven marketing. These manufacturers, distributors, and marketers work within vibrant distribution and promotional networks that are effective in reaching and motivating consumers. Successful companies also have a highly developed capacity to influence customer behavior in the most cost-effective ways.

Normally, the public and the private sectors work independently, and donors and ministries of health have made only limited efforts to seek partnerships with commercial firms. Public-private partnerships have the potential to reinforce and expand the capabilities of donors and ministries of health and to increase the use of essential products in a sustainable and efficient way.

For public-private partnerships to work, they must be mutually beneficial and part of an overall strategy to deliver needed products and services. Bringing in the private sector to help achieve public health objectives does not mean replacing the public sector. A coordinated approach helps rationalize spending on priority health needs at both the national and the individual levels. For example, companies can relieve the burden

Past Experiences with Public-Private Partnerships for Child Health

The Regional Handwashing Initiative is not the first USAID-funded effort of its kind. In the early 1990s, USAID's PRITECH Project (Technologies for Primary Health Care) developed an approach to engage private sector companies in the prevention and treatment of diarrheal diseases. The approach was tested in Indonesia, where PRITECH involved major soap producers in a coordinated hygiene campaign in partnership with the government, media personnel, and the advertising council. (There was no evaluation of the campaign impact, however.)

Several other public-private partnerships focusing on diarrheal disease and the promotion of oral rehydration therapy (ORT) also preceded and informed the Central American Handwashing Initiative:

- a partnership among Sterling Beecham, UNICEF, USAID/PRITECH, and the government of Kenya to ensure nationwide availability of oral rehydration salts (ORS) and increase their use for the prevention and treatment of dehydration due to diarrhea;
- a collaboration brokered by PRITECH between ORS producers in Pakistan and the Ministry of Health to commercialize ORS and minimize the burden of procurement on the government through (tax-free) low-price, extended distribution to rural areas and promotion in conformity with national policy;
- a partnership among two ORS producers in Bolivia, the Pan American Health Organization (PAHO), UNICEF, BASICS, and the Ministry of Health to produce and market ORS in pharmacies and beyond to rural outlets.

on public sector resources through market segmentation that targets those willing and able to pay for products and services through private channels. Typically, the private sector can offer a wider range of choice, higher quality, and convenience.

The coverage of populations with disposable income by the commercial sector is obviously not an adequate solution to most public health needs, since populations with the heaviest health burden are often least able to pay. However, public health delivery systems often serve a disproportionate number of people who can afford to pay. When these populations are offered convenient, high quality, affordable options through the commercial sector, they are often eager to switch, freeing public sector resources for those most in need.

Public-private collaborations are more successful in countries in which there is a thriving commercial infrastructure and governments view public health as a priority. Regional approaches also require favorable regulations and trade agreements.

The "Nautilus": An Approach to Public-Private Partnerships

The Central American Handwashing Initiative followed an approach that BASICS has developed and applied in various settings to promote public-private partnerships. The approach is designed for a donor-funded organization that serves as a catalyst—to initiate the partnership, provide technical assistance and other resources, and keep things moving.

The sequence of activities may vary depending upon the circumstances, particularly regarding the point at which the public sector is brought into the process. Figure 1 depicts the steps followed in the Central American Handwashing Initiative as the "chambers" in a nautilus.[1]

1. More details on the approach, and variations of it, may be found in *Mobilizing the Commercial Sector for Public Health Objectives*, published jointly by UNICEF and USAID (Slater and Saadé 1996).

Step 1 *State relevant public health objective.* The health objective identified must lend itself to private-sector involvement. In practical terms, this usually means identifying a key health-related behavior connected with a health care product (e.g., use of ORS to prevent and treat dehydration from diarrhea and use of iodized salt and other fortified foods to improve nutrition).

Step 2 *Assess market potential*. Both the size of the current market for a health-related product as well as the size of the untapped potential market should be estimated. A dynamic market segment attracts competition. Evaluating the market share of each competitor helps identify the dominant forces and trendsetters.

Step 3 *Assess company capabilities.* Information is gathered on all firms manufacturing or distributing the health care product. (What is their product? Where is it sold? How much does it cost? Who buys it? How is it advertised? For whom is it targeted?) An effective way to get answers to these and other such questions is to meet with a representative of each company's top management for an informational interview. This first contact also gives the catalyst a chance to introduce the concept of a public-private partnership and gauge the company's interest.

Step 4 *Select partner companies.* Establish criteria for involvement and invite the appropriate company or companies to participate. Some partnerships may involve just one company, while others will involve several. (An exclusive arrangement may be appropriate if the goal is to provide a specific product for distribution in a public health program.)

Step 5 *Request feasibility study.* Companies conduct feasibility studies with well-considered projections of potential revenue, expenses, and profits over five years to enable them to make a corporate decision about whether or not to engage in the partnership. Such a study helps the partnership avoid building unrealistic expectations. It also forces an internal company discussion of the pros and cons of participation.

Step 6 *Finalize partnership.* The partnership is formalized in a memorandum of understanding outlining the goals, roles and responsibilities, and contributions of the major partners. There should be ample time for decision makers in the participating organizations to review and revise the agreement before signing it. The agreement should provide for the formation of a task force made up of representatives from the partner organizations to guide the remaining steps in the process.

Step 7 *Prepare marketing plan*. Together the partners develop a preliminary marketing plan based on the public health goal. For example, the Handwashing Initiative's plan was to promote the beneficial health effects of handwashing with soap to low-income groups with high rates of diarrheal disease, using appropriate communication channels involving media, community activities, and interpersonal communication according to the combined and individual resources of the partners.

Step 8 *Carry out baseline market research*. Before a marketing strategy can be developed, the companies must find out how much consumers know about the health problem being addressed and what their related practices and motivations are. Market research techniques, such as surveys, focus group discussions, or observation, can be used. Such research can also provide baseline information about knowledge, attitudes, beliefs, and behaviors, so that results can be monitored. It is usually advisable to contract with a professional market research agency for this work.

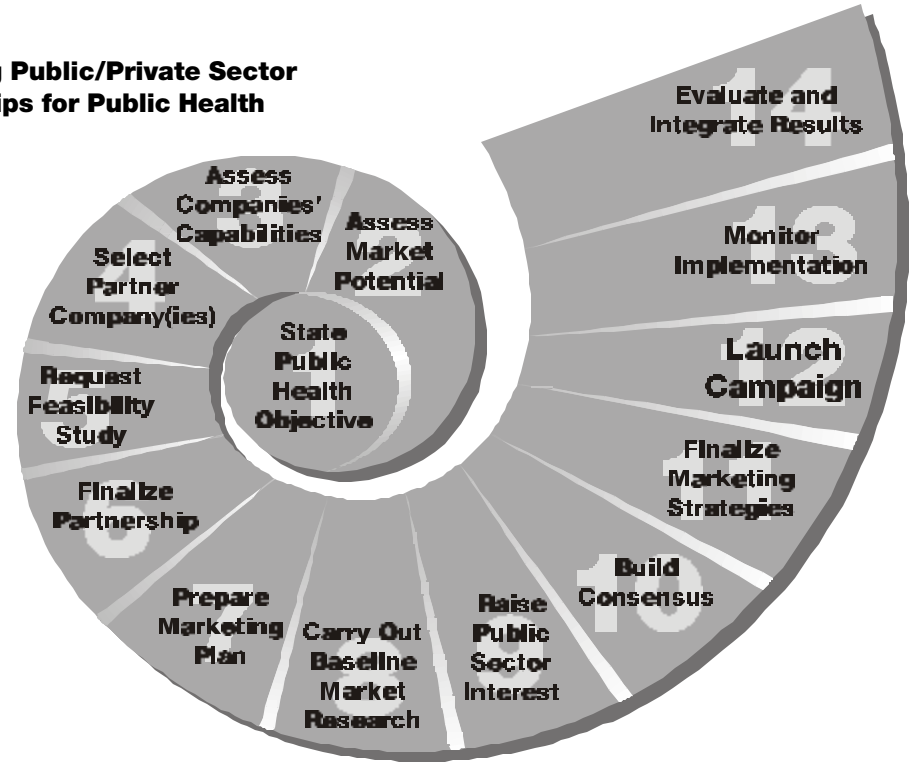
Step 9 *Raise public sector interest.* After the market survey has been completed and the results analyzed, the task force meets with public sector organizations to invite their involvement and collaboration. It is important to contact key public health officers, especially those who may be enthusiastic about working collaboratively with the private sector. In the Handwashing Initiative, the soap companies preferred to postpone involvement of the public sector until plans were fairly well developed. However, the public sector might be involved first, before private companies have joined the effort. In such situations, the public sector might play a role similar to the catalyst's, reaching out to the private sector. International and regional lending institutions, bilateral aid agencies, professional associations, and NGOs are also contacted to expand the partnership and help foster public-private collaboration for health goals.

Step 10 *Build consensus*. Consensus is built as the partners in the public and private sectors discuss and address public health and business concerns in a neutral way and develop a joint work plan with an appropriate time frame and a clear definition of roles and responsibilities.

Step 11 *Finalize marketing strategies.* Using the market research data, the partners finalize the marketing plan, including the communication strategy. An advertising agency develops the creative concepts and reviews them with the partners. The concepts should be tested with the intended target audience before the promotional materials are produced.

Step 12 *Launch campaign.* An advertising launch provides a great opportunity to solidify the commitment of each partner.

Figure 1. The Nautilus



A well-planned public relations event will create long-lasting promotional "noise" for the benefit of the campaign.

Step 13 *Monitor implementation*. The catalyst ensures that the marketing plan is implemented according to schedule by reviewing the plan regularly, monitoring each partner's activities, marshaling resources to solve problems, recognizing contributions, and ensuring that sufficient data are collected to measure impact.

Step 14 *Evaluate and integrate results.* The catalyst and public sector partners are usually responsible for measuring and documenting the partnership activities and determining their impact on public health. Commercial firms may collect their own data to show the impact of the partnership activities on their sales. The main purpose of evaluation is to improve subsequent efforts. Therefore, a mechanism must be in place to document results, integrate them into future activities, and disseminate them to stakeholders.

A Promising Opportunity

The project described here was part of USAID's attempt to hone an approach to public-private partnerships and to document its effect on the target population. The project essentially began "at scale" because it was implemented at the national level in three countries. Most handwashing studies in the past have been aimed at relatively small populations with levels of external inputs that were not generally sustainable.

Promoting handwashing is a natural goal for a public-private partnership. The potential for combined public health and commercial benefits promises that initial investments may lead to a partnership that is self sustaining—and that will bring lasting benefits.

The Handwashing Initiative in a Nutshell

BASICS/EHP began work on the Central American Handwashing Initiative in 1996 by contacting all soap producers in five countries (Guatemala, Costa Rica, Honduras, Nicaragua, and El Salvador) to assess their interest. Eventually four companies—including multinationals as well as regional and national soap producers—joined the collaborative effort. A Task Force made up of representatives from each company, BASICS, and EHP met periodically to guide the Initiative.

The advertising strategy was based on a market survey financed by BASICS, with technical assistance from EHP (see Chapter

Figure 2. Handwashing Initiative Time Line

Phase One: Conceptualizing The Initiative			*Phase Two:*			
Jan 95 – Jan 96			*Jan 96*		*Mar 96*	*Jul 96*
Nautilus Step #1: State public health objective	**Step #2**: Assess market potential	**Step #3**: Assess company capabilities	**Step #4**: Select partner companies	**Step #5**: Request feasibility study	**Step #6**: Finalize partnership	**Step #7**: Prepare marketing plan

6). The survey results revealed that fewer than ten percent of mothers in low-income rural areas washed their hands in an optimal fashion. The project defined this optimal behavior as:

- washing at *three key times* (before cooking or preparing food, before feeding children or eating, and after defecating and—for those with babies—after changing babies' diapers)
- with *three correct techniques* (using soap, rubbing hands together at least three times, and drying with a clean towel).

The survey also confirmed a correlation among survey participants between poorer handwashing practices and a higher prevalence of child diarrhea.

BASICS financed preparation of a generic advertising campaign based on the market survey to communicate the "three times/three elements" message. The generic campaign could be used as it was or adapted by the companies in campaigns for their own brands of soap.

"The main reason for the Handwashing Initiative was to try to get the best of two worlds."

— Baudilio Lopez, USAID, Guatemala

As soon as the creative strategy had been developed, the Task Force presented it to ministries of health and education, donor organizations, and NGOs and asked them to join the Initiative. The response was very positive: ministries of health endorsed the campaign and distributed materials to health centers and schools; media companies donated time; UNICEF incorporated the messages in its local programs; and USAID and UNICEF enlisted their NGO networks in distributing the handwashing promotional materials.

The intervention was carried out in three of the five countries: Guatemala, Costa Rica, and El Salvador. Campaign elements included television and radio advertisements, distribution of posters and brochures, mobile units distributing soap samples, and school programs.

About a year after the launch of the campaign, BASICS financed a follow-up market survey to assess impact. The second survey, which was essentially a repeat of the earlier baseline survey, showed improvements in handwashing behaviors and beliefs

Planning & Development				***Phase Three: Implementation***		***Phase Four: Assessment & Dissemination***
Jun 96 – Sep 96	***Sep 96 – Feb 98***	***May 97 – Sep 97***	***Oct 97***	***Mar 98 – Sep 98***	***Mar 98 – Sep 99***	***Oct 99 – Nov 99*** *(some activities continuing to present)*
Step #8: Carry out baseline market research	**Step #9**: Raise public sector interest	**Step #10**: Build consensus	**Step #11**: Finalize marketing strategies, test and produce material	**Step #12**: Launch campaign	**Step #13**: Monitor implementation	**Step #14**: Conduct evaluation and integrate results

and attitudes among the target population. Based on observed relationships between handwashing behavior and diarrhea in these studies and supporting scientific literature, one can also estimate that over the course of the intervention there was an overall reduction in diarrheal prevalence of about 4.5 percent among children under five. (See Chapter 8 and Annex C.) At a national level, such a reduction would represent a significant impact on public health.

A relatively small amount of funds ($389,000 over four years) from the donor organization for the catalyst activities leveraged resources for diarrheal disease prevention from the private sector valued at approximately $614,900 in just the first year of the campaign.

Figure 2 provides a time line for project activities, related to the steps of the Nautilus.

Overview of the Document

This report uses the story of a successful project as the jumping off point to describe the replicable elements of a public-private partnership for achieving health goals. In these pages, project planners from donor organizations, as well as ministry of health officials and representatives of commercial firms, can learn about the essential elements of public-private partnerships. How are activities sequenced? Who must be involved—and how deeply? What resources must be available? What kind of expertise is needed? What results might be expected? What are the pitfalls and how can they be avoided?

Readers should find information to help them decide whether the approach might enhance their programs, and understand the time and resources such an approach would require.

Chapter 2: *The Public Health Goal: Saving the Lives of Children,* explains the public health challenge addressed by the Initiative.

The next three chapters focus on the roles of the key players in the partnership:

- Chapter 3: *The Catalyst's* roles and responsibilities, activities, and issues and lessons learned.
- Chapter 4: *The Private Sector Partners'* goals, activities, interactions with the catalyst and other partners, and issues and lessons learned.
- Chapter 5: *The Public Sector and Other Partners'* activities, and issues and lessons learned.

Three chapters describe the intervention itself:

- Chapter 6: *Marketing Strategy Development* covers the market survey, development of an advertising strategy, field-testing, the generic campaign, and issues and lessons learned.
- Chapter 7: *The Advertising Campaign* describes the launch, breadth, and scope of the campaign, variations from company to company and country to country, and issues and lessons learned.
- Chapter 8: *Results* summarizes what the campaign achieved in terms of behavior change, diarrhea prevalence, and institutional changes among the partners.

Chapter 9 : *Key Points for Replication,* includes critical success factors, outstanding issues, obstacles, and recapitulates key steps.

Works Cited

Slater, S, and C Saadé. 1996. *Mobilizing the Commercial Sector for Public Health Objectives. A Practical Guide.* New York and Washington, DC: UNICEF and USAID/BASICS.

The Public Health Goal
Saving the Lives of Children

This chapter establishes the significance and the appropriateness of the public health goal of the Central American Handwashing Initiative by . . .

- Presenting diarrheal disease morbidity and mortality figures for Central America and for developing countries in general.
- Discussing handwashing as an effective intervention for diarrheal disease prevention.
- Explaining the potential role of the private sector in promoting handwashing.

When the Central American Handwashing Initiative began, an estimated 11 million children under five years of age were dying each year worldwide. About one-fifth of these—2.2 million childhood deaths—were due to diarrhea (Murray and Lopez 1996).

Diarrhea Morbidity and Mortality in Central America

In Central America, frequent diarrhea has a marked impact on the lives of children. According to UNICEF's *State of the World's Children* (1995), at about the time of the Initiative, diarrheal disease was the cause of 19 percent of under-five mortality in Honduras, 23 percent in Nicaragua, 20 percent in El Salvador, and 45 percent in Guatemala. Diarrheal disease is more prevalent among children whose families' socioeconomic status and educational levels are low and who live in remote areas.

The Burden of Diarrheal Disease

Diarrhea-related deaths have been reduced dramatically over the past 25 years thanks to improved treatment with oral rehydration salts (ORS), which prevents dehydration. However, diarrhea mortality remains high, and deaths will not continue to decline solely through the use of oral rehydration therapy. Evidence is accumulating that many of the children who die with diarrhea today have dysentery, prolonged diarrhea, or diarrhea combined with malnutrition (Victora et al. 1993, Bhan et al. 1996, and Fauveau et al. 1991). A more comprehensive approach to reducing such deaths is needed that also addresses the source of the problem.

Diarrhea is the most frequent significant illness of children under five throughout the world. In some parts of Latin America, children under three have an average of ten episodes of diarrhea each year. In Demographic and Health Surveys (DHS) conducted in many countries throughout the developing world, approximately 20 percent of mothers report that a child under five has had diarrhea in the two weeks before the survey.

Diarrhea—especially frequent and prolonged episodes and dysentery—is also one of the main causes of malnutrition (Martorell et al. 1975 and Alam et al. 2000). And even mild malnutrition is associated with increased risk of death from a variety of common childhood illnesses (Pelletier et al. 1995). In addition, families face numerous direct and indirect costs when a young child has diarrhea: expenses for treatment, lost work and wages for parents, older siblings kept out of school to care for the sick child, an additional strain on the resources of already overburdened mothers, and so on. Reducing the burden of diarrhea is clearly one of the most important public health priorities in the developing world today.

Handwashing and Diarrhea Prevention

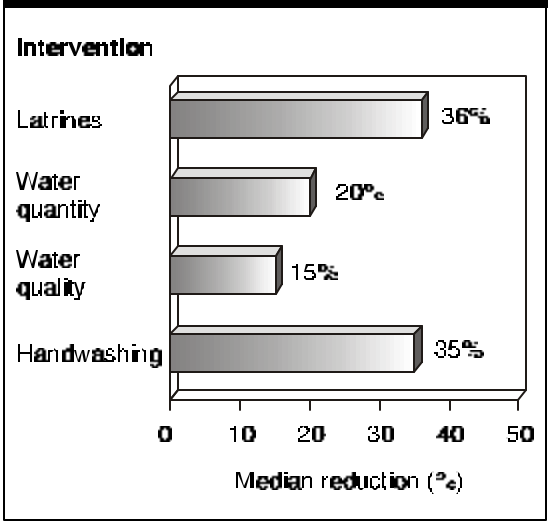
The means by which diarrhea is spread have been generally understood for many years. Minute quantities of fecal matter from a sick person are ingested by a new host. Hands are an important vehicle in this fecal-oral transmission route, especially the hands of mothers and other caretakers of children. If a mother's hands are not free of fecal contamination, the risk of spreading diarrhea to the family through water and food is high. Enteric bacteria can survive on hands for at least three hours and can easily be transferred to food and to other family members.

Likewise, the means to prevent diarrhea have been well documented. Esrey et al. in 1991 and Huttly et al. in 1997 reviewed all relevant studies on diarrheal disease prevention. Figure 3 summarizes what these

studies revealed about the effectiveness of various interventions. One remarkable finding is the effectiveness of improved handwashing to prevent diarrhea—both in developing and developed countries. This should be no surprise, as handwashing has long been understood to be the key to preventing the spread of infection in hospitals—although even in hospitals this practice is poorly implemented (Boyce 1999 and Pittel and Boyce 2001). Most cultures consider handwashing a fundamental aspect of personal cleanliness.

The box on this page gives the findings of several representative studies of handwashing. Effective programs to improve handwashing of mothers and other caretakers of children, as well as other hygiene behaviors, compare favorably in cost-benefit to other specific child health interventions (Varley et al. 1998).

Figure 3. The Effectiveness of Interventions to Prevent Diarrhea



Source: Esrey et al. 1991; Huttly et al. 1997.

Handwashing Not Commonly Practiced

In many parts of the world, handwashing is not well recognized as a means to prevent diarrhea and is not commonly practiced. To prevent diarrhea, at a minimum, people must wash their hands at certain critical times using proper technique. The critical *times* are before cooking or preparing food, before feeding children or eating and, after defecation, or cleaning babies or changing their diapers. The proper *technique* is to use clean water and soap, to rub hands together

Sample Studies of the Effectiveness of Handwashing

Ten studies of handwashing were included in a review of interventions to prevent diarrhea (Huttly et al. 1997). All reported a positive relation between improved handwashing and diarrheal prevention, with a median reduction of 33 percent (range 11-89 percent). The finding that improved handwashing can prevent diarrhea was remarkably consistent in a variety of settings. For example, Black et al. (1981) cited reductions of 43 percent in diarrhea among day-care center children in the United States resulting from a simple handwashing intervention. In Indonesia, improved handwashing behavior by 65 mothers (who received soap and explanations of the fecal-oral route of diarrhea transmission) reduced diarrhea incidence in their children by 89 percent (Wilson et al. 1991). Similarly, handwashing and hygiene behavior interventions reduced diarrheal disease by up to 39 percent in rural Thai villages (Pinfold and Horan 1996).

Handwashing interventions in urban Bangladesh reduced dysentery (shigella) by 35 percent and non-dysenteric diarrhea by 37 percent among all age groups (Khan 1982). In Myanmar, childhood diarrhea was reduced by 30 percent in urban households where the mother was given soap and handwashing education (Han and Hlaing 1989).

In more recent studies not included in the 1997 review, soap distribution with handwashing education was associated with a 33 percent decrease in childhood diarrhea in urban Bangladesh (Shahid et al. 1996) and soap distribution alone was associated with a 27 percent reduction in diarrhea in a refugee camp in Malawi (Peterson et al. 1998).

at least three times, and to rinse them well and dry them hygienically (Favin et al. 1999). Under ideal circumstances, additional handwashing is advisable; however, the critical times and techniques provide a great deal of protection and are feasible for people whose time and resources may make additional handwashing excessively burdensome.

Mothers in developing countries often do not use the proper technique; the most common failing is to wash with water alone—no soap. Likewise, they do not consistently wash at critical times. Many cultures perceive soap as necessary only for washing clothes, bathing, and when the hands feel or look soiled.

"We genuinely believed in the campaign and its cause. This allowed us to keep in mind at every moment that we were perhaps saving a life . . . We started to visualize the true meaning of this project: to save lives."

— Jorge Mario Lopez, La Popular, Guatemala

Private Sector Potential

While the beneficial health effects of proper handwashing with soap have been well documented, public health sector efforts to improve handwashing have not been shown effective. Educational campaigns conducted by the public health sector can be labor-intensive and time-consuming for busy health care providers, may be ineffective in terms of influencing behaviors, may not reach the most at-risk populations, and so on. Public education campaigns for handwashing are expensive to maintain at the level that may lead to lasting changes, and may not be well designed in many cases.

The private sector offers an under-utilized resource for transmitting health information by advertising soap and its appropriate use as a means to prevent diarrhea. Involvement of the private sector can significantly strengthen and supplement the efforts of the public sector. The private sector can provide a valuable public service while developing the market for inexpensive soap for handwashing and increasing market share.

Works Cited

Alam, DS, GC Marks, AH Baqui, M Yunus, and GJ Fuchs. 2000. Association Between Clinical Type of Diarrhea and Growth of Children under 5 Years in Rural Bangladesh. *International Journal of Epidemiology* 29:916-921.

Bhan, MK, N Bhandari, S Bhatnagar, and R Bahl. 1996. Epidemiology and Management of Persistent Diarrhoea in Children of Developing Countries. *Indian Journal of Medical Research* 104:103-114.

Black, RE, AC Dykes, KE Anderson, JG Wells, SP Sinclair, GW Gary, Jr., MH Hatch, and EJ Gangarosa. 1981. Handwashing to Prevent Diarrhea in Day-Care Centers. *American Journal of Epidemiology* 113(4):445-451.

Boyce, JM. 1999. It is Time for Action: Improving Hand Hygiene in Hospitals. *Annals of Internal Medicine 130:153-155.*

Esrey, SA, JB Potash, L Roberts, and C Shiff. 1991. Effects of Improved Water Supply and Sanitation on Ascariasis, Diarrhoea, Dracunculiasis, Hookworm Infection, Schistosomiasis, and Tracoma. *Bulletin of the World Health Organization* 69(5):609-621.

Fauveau, VM, K Yunus, J Zaman, Chakraborty, and AM Sarder. 1991. Diarrhoea Mortality in Rural Bangladeshi Children. *Journal of Tropical Pediatrics 37(1):31-36.*

Favin, M, M Yacoob, and D Bendahmane. 1999. *Behavior First: A Minimum Package of Environmental Health Behaviors to Improve Child Health*. EHP Applied Study No. 10. Arlington, Virginia: Environmental Health Project.

Han, AM and T Hlaing. 1989. Prevention of Diarrhoea and Dysentery by Hand Washing. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 83:128-131.

Huttly, SRA, SS Morris, and V Pisani. 1997. Prevention of Diarrhoea in Young Children in Developing Countries. *Bulletin of the World Health Organization* 75:163-174.

Khan, MU. 1982. Interruption of Shigellosis by Hand Washing. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 76:164-168.

Martorell, R, C Yarbrough, A Lechtig, JP Habicht, and RE Klein. 1975. Diarrheal Diseases and Growth Retardation in Pre-school Guatemalan Children. *American Journal of Physical Anthropology* 43:341-6.

Murray, C, and A Lopez, eds. 1996. *Global Health Statistics: Volume 2.* World Health Organization, World Bank and Harvard School of Public Health.

Pelletier, DL, EA Frongillo, Jr., DG Schroeder, and JP Habicht. 1995. The Effects of Malnutrition on Child Mortality in Developing Countries. *Bulletin of the World Health Organization* 73(4):443-448.

Peterson EA, L Roberts, MJ Toole, DE Peterson. 1998. The Effect of Soap Distribution on Diarrhoea: Nyanmithuthu Refugee Camp. *International Journal of Epidemiology* 27(3):520-4.

Pinfold, JV, and NJ Horan. 1996. Measuring the Effect of a Hygiene Behaviour Intervention by Indicators of Behaviour and Diarrhoeal Disease*. Transactions of the Royal Society of Tropical Medicine and Hygiene* 90(4): 366-371.

Pittet, D, and JM Boyce. 2001. Hand Hygiene and Patient Care: Pursuing the Semmelweis Legacy. *Lancet Infectious Diseases* April: 9-20; http://infection.thelancet.com/journal/review9.html.

Shahid, NS, WB Greenough 3rd, AR Samadi, MI Huq, N Rahman. 1996. Hand Washing with Soap Reduces Diarrhoea and Spread of Bacterial Pathogens in a Bangladesh Village. *Journal of Diarrhoeal Disease Research* 14(2):85-89.

State of the World's Children. 1995. New York: UNICEF.

Varley, RC, J Tarvid, DN Chao. 1998. A Reassessment of the Cost-effectiveness of Water and Sanitation Interventions in Programmes for Controlling Childhood Diarrhoea. *Bulletin of the World Health Organization* 76(6):617-31.

Victora, CG, SR Huttly, SC Fuchs, FC Barros, M Garenne, O Leroy, O Fontaine, JP Beau, V Fauveau, and H R Chowdhury. 1993. International Differences in Clinical Patterns of Diarrhoeal Deaths: A Comparison of Children from Brazil, Senegal, Bangladesh, and India. *Journal of Diarrheal Disease Research* 11(1):25-29.

Wilson, JM, GN Chandler, Muslihatun, and Jamiluddin. 1991. Hand-Washing Reduces Diarrhoea Episodes: A Study in Lombok, Indonesia. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 85:819-821.

The Catalyst
Bringing the Partners Together

Three types of organizations are involved in a public-private partnership: catalyst, private sector, and public sector. This chapter takes an in-depth look at the catalyst by…

- Enumerating the roles and responsibilities of the catalyst (BASICS/EHP) as outlined in the memorandum of understanding of the Central American Handwashing Initiative.
- Describing the catalyst's contribution to the planning, implementation, and assessment phases of the Initiative.
- Providing tips for carrying out the role of catalyst effectively.

A successful public-private partnership is often initiated by an intermediary—a bilateral or multilateral donor organization or an NGO. The intermediary brings resources and expertise to the table, but functions mainly to help the public and private sectors work together, using their resources in innovative ways for public health benefits. We call this partner a catalyst because, like a chemical catalyst, it is the "stimulus in bringing about or hastening a result."

BASICS Prepares to Play the Role of Catalyst

In 1995, USAID's BASICS Project began to explore the potential of the private sector in Central America to assist the public sector in preventing and treating the serious problem of diarrheal disease. The project's private sector specialist traveled to the region to identify opportunities for mobilizing commercial firms to produce and market products for preventing and treating diarrhea. He focused on handwashing with soap, disinfecting water with household chlorine, and the prevention and treatment of dehydration with ORS as the most appropriate areas for private-sector involvement.

This preliminary work revealed that the soap companies were very successful in getting their products into every small retail outlet in rural as well as urban areas. They were intrigued by the idea of positioning a brand of soap for handwashing. BASICS concluded that providing the companies with evidence of market potential through a market research study would influence their decisions about investing in this new market "niche."

USAID's Environmental Health Project (EHP) was a natural partner because of its commitment to preventing childhood disease through environmental improvements and behavior change and its specific experience in handwashing promotion. EHP's regional advisor in Central America was assigned to the Initiative. He and the BASICS' private sector specialist visited soap producers and USAID officials in Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua a second time in 1996 to ask the producers to join the proposed Initiative.

"There is the possibility of working together, even among different institutions, but only if there is communication. There must also be an institution that is capable of leading and guiding the process."

— Jorge Mario Molina, UNICEF, Guatemala

The original idea had been to promote both soap for handwashing and household chlorine for water purification, but the decision was made to focus on soap and then build on that experience, perhaps introducing chlorine later. Important considerations that weighed against including chlorine were that (1) bleach and soap marketing were segregated within companies; (2) developing, promoting, and evaluating bleach use for water disinfection was more complex; and (3) a number of safety issues related to bleach promotion were not relevant for soap promotion. The single focus of the Initiative made it easier to design and evaluate.

Roles and Responsibilities

Conceptualizing the public-private partnership initiative is perhaps the most important responsibility of the catalyst. Additional roles

and responsibilities were laid out during a BASICS-EHP meeting in February 1996, agreed upon by the producers in their first meeting in March 1996, and stated in the Convenio, the memorandum of agreement that all parties to the Initiative signed (see Annex A).

The three main responsibilities were divided among BASICS and EHP, the two organizations that comprised the catalyst team:

- Facilitate the work of the Task Force set up to guide the Initiative;
- Provide technical assistance in developing the campaign strategy;
- Finance the market survey, development of generic creative concepts, and evaluation study.

BASICS provided overall leadership and support, technical leadership in marketing and working with the private sector, and secretarial and administrative support. EHP's specific responsibilities were in research—design, data analysis, and presentation—and quality control of health-related messages for the campaign. About midway into the effort, the catalyst team hired a local coordinator to facilitate planning and implementation, especially in Guatemala, where she was located.

Activities

The Initiative was divided into four phases:

- Conceptualizing the Initiative (steps 1-3 of the Nautilus);
- Planning and developing the advertising campaign (steps 4-11);
- Implementing the campaign (steps 12 and 13);
- Assessing the effort and disseminating findings and lessons learned (step 14).

The Initiative was originally scheduled to begin in January 1996 and end in September 1998. However, it was completed in 1999 because of delays along the way.

***Phase One: Conceptualizing the Initiative** (January 1995 – January 1996)*

Catalyst activities in the preliminary phase consisted of identifying the problem to be addressed and making preliminary visits to the countries to test the feasibility of a public-private partnership. All five countries—Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua—shared a thriving commercial infrastructure that offered excellent opportunities for contributing to child survival programs. Their governments were concerned about diarrheal disease. Regulations and trade agreements favored a regional approach, and most successful manufacturers already had a regional scope of operations.

"The catalyst also knew how to balance the private competing enterprises so that there was no personal interest, but rather only general interest present."

— Ileana Quiros, Colgate-Palmolive, Costa Rica

***Phase Two: Planning and Development** (January 1996 – October 1997)*

Organizational Meeting. In March 1996, BASICS called a one-day meeting of the chief executive officers (or other top management officials) of the interested soap companies in the region. Five companies sent representatives.

Participants agreed on the broad strategy, discussed their expectations, reviewed a draft memorandum of understanding that set out the goals, roles, and responsibilities of all parties and a general strategy. They also made a list of the information that the proposed market study should obtain, established a task force, and developed a preliminary work plan. The Task Force included the marketing managers of each of the companies plus the catalyst team.

As a follow-up to this meeting, the companies were sent copies of the

memorandum of understanding and asked to sign. Unlike a formal contract, the memorandum provided general guidelines and allowed flexibility for individual implementation. Asking competing companies to agree to collaborate when they were used to working alone (and when several of them were quite open about preferring to work alone) was a sensitive matter, raising fears about confidentiality and proprietary information. The agreement had to allow each company to define the specific terms of its own participation.

> *"The involvement of international organizations was also very important because it helped us to sell the campaign within our own company."*
>
> *— Jorge Mario Lopez, La Popular, Guatemala*

Task Force Meetings. The first meeting of the Task Force took place in June 1996 to review the memorandum of understanding and the plan for the baseline market survey. Subsequent meetings were held in October 1996 (to review the baseline survey results and develop the communication strategy); May 1997 (to present the creative concepts); October 1997 (to test and select the final concept); July 1998 (to distribute master copies of the generic campaign); and January 1999 (to review the status of the campaign launch). By the final Task Force meeting, the project was in the implementation phase.

Support for Developing and Testing Advertising Concepts. The catalyst provided technical support in developing the advertising campaign to ensure that public health goals would be addressed. This support included selecting and hiring consulting firms, providing technical assistance to those firms, and assisting each of the soap producers.

- *Selecting consulting firms.* Using criteria and other suggestions from the Task Force, the catalyst team hired a market research firm and an advertising agency. This task included preparing contract documents required by USAID, reviewing bids, selecting contractors, and supervising the contracts. Since the catalyst paid the fees charged by these firms, it had the final word in oversight. However, it would have been counterproductive to ignore the wishes of the Task Force. For example, some Task Force members insisted that the advertising firm selected be one that had no other soap accounts, which narrowed the field significantly. This requirement and other Task Force stipulations caused a significant delay in selecting the advertising agency.
- *Technical assistance for consulting firms*. The catalyst team met frequently with key people in the market research and advertising agencies, helping them focus on the public health objectives as the market survey was designed and conducted and the advertising strategy developed. In particular, the catalyst provided technical assistance to the agencies on health-related data requirements, methods of data collection, and analysis. The catalyst also helped both agencies make effective presentations to the Task Force, other potential partners, public health officials, and USAID.
- *Assisting the soap producers individually*. The soap producers hesitated to share information about company operations in Task Force meetings. To respect this desire for confidentiality, the catalyst team kept in close individual contact with all producers throughout the development phase and assisted them in using the data from the market research and the advertising concepts.

Public Relations Efforts. One of the jobs of the advertising agency was to create a public relations package that could be used to make presentations to additional partners from the

public and nongovernmental sectors. In February 1998, the Task Force assisted the catalyst team in a blitz public relations tour to Guatemala, El Salvador, and Honduras to consult with soap producer personnel, the USAID missions, and UNICEF on the best approach to reaching public sector decision makers who could influence the expansion of the campaign.

Liaison with USAID. The catalyst briefed the USAID missions in each of the four countries on every visit. The missions supported the Initiative by arranging meetings with key people in the ministries of health and by facilitating the involvement of NGOs in the campaign.

Phase Three: Implementation (March 1998 – September 1999)

The Initiative was designed so that the catalyst's role would diminish greatly once the intervention was launched, leaving the producers to continue their handwashing campaigns in partnership with public agencies. The goal was to create within the soap companies a sustainable interest in pursuing public health goals congruent with their own sales targets.

Two Task Force meetings were held for producers to share their launch experiences and ideas for enlisting additional partners. In addition, the catalyst team met individually with each producer in September 1999 to monitor the campaign and prepare for the evaluation.

To coordinate the activities of the increasing number of local partners in Guatemala, the local coordinator organized a national task force that included the local soap producers, the media, the Ministry of Health, USAID, UNICEF, PAHO, and representatives of NGOs and foundations. (Local task forces were not formally organized in the other countries.)

"Both public and private sectors brought to the table their own experiences and strengths, making the partnership a solid team with a common vision."

— Baudilio Lopez, USAID, Guatemala

Except for work on phase four, BASICS' role changed from leading to coaching during 1999 and, during 2000, from coaching to serving as an intermediary on retainer. A key element in this transition was developing and achieving consensus on a plan that specified partners' new roles as BASICS pulled away.

Phase Four: Assessment and Dissemination (October 1999 – 2001)

The principal activities under Phase Four were an assessment of the Initiative and analysis and presentation of the results.

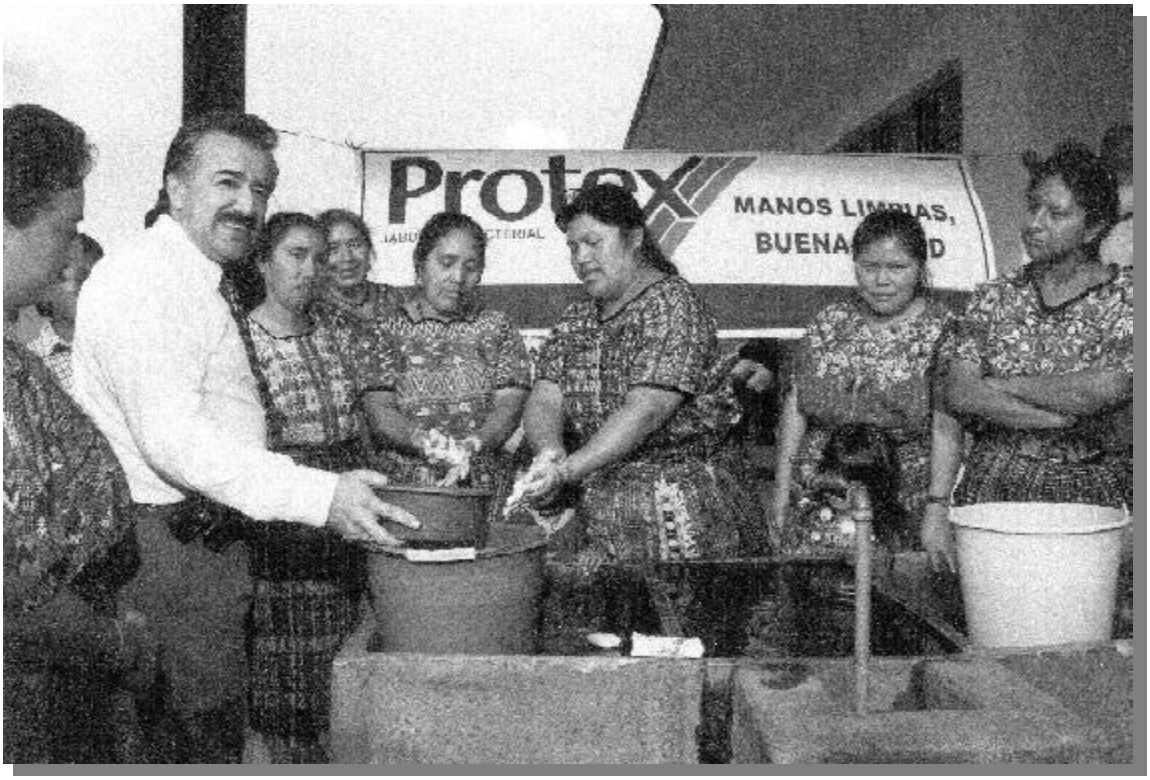
Follow-up Assessment. The catalyst was responsible for conducting and analyzing the follow-up survey. The original plan called for an assessment about a year after launch of the campaign. BASICS solicited a proposal from the same firm that had done the baseline market survey to conduct a study of households in the same sample clusters and compare the results. The second study was carried out in October and November 1999.

Presentations. The catalyst team presented the results of the Handwashing Initiative in April 2000 at an official event sponsored by the Ministry of Health in Guatemala. The event, which was covered by the media, was an excellent opportunity for public recognition of the soap producers, the partnering media, and the funding agencies. Further presentations were given outside the Central American region to various groups: the Global Health Council, the Society for International Development, the Pan American Health Organization, UNICEF, the World Bank, the World Federation of Public Health Associations, and USAID. The purpose of the presentations was to communicate to USAID the results of its investments and to interest other organizations in the potential of public-private partnerships for achieving health goals.

Issues and Lessons Learned

- **A catalyst must offer more than mere coordination to attract private sector partners.** In this case, the catalyst was able to put market research and development of the communication strategy on the table. The catalyst should offer expertise and experience in both the commercial sector and public health.
- **From the outset, the catalyst must foster a sense that the initiative belongs to all the partners**. If only one partner claims ownership, the effort may be stalled. The catalyst is not the owner.
- **The catalyst should always have a clear vision of the project's goals and stay focused on those goals.** This is a vital part of the conceptualization process. It is much easier to get partners to participate if the goal is clearly understandable, easy to articulate, and generally considered worthwhile. The catalyst must also present a compelling case for the public good (in this case, reduced diarrhea and improved child health) that can be achieved through private sector participation.
- **The catalyst's vision should be based on a strong model,** such as BASICS' public-private model (the Nautilus), shared among the partners as a basis for collaboration.
- **A catalyst's sponsoring organization must provide steady, flexible support.** USAID created an environment in which new approaches could be tried out and adjustments and corrections could be made as needed. An initiative like the one described here must be flexible because it brings together organizations with different motivations and priorities.
- **The catalyst should ensure that the roles, responsibilities, and expectations of all are clearly articulated and that project processes are transparent.** For example, agreements should be documented and face-to-face meetings held.
- **Technical assistance for the private sector must retain an entrepreneurial spirit** to enable the partnership to take advantage of new opportunities and react quickly in times of crisis. For example, in Guatemala, using a network of relations, the catalyst won the support of the owner of the main television channel, who donated free time to air the generic campaign for a full year.
- **A local coordinator makes it much easier for the catalyst to play its role effectively and to maximize the participation of all partners.** Nothing can take the place of regular personal contacts and monitoring. Further, a local coordinator can follow up after the project is officially over to see how sustainable the effort has been. The right person for this job will know the local players in the development field and be familiar with market research and advertising.
- **Analyzing and documenting project experience and lessons learned will help ensure that innovative approaches are widely replicated.** When a project is completed, managers often turn toward another assignment, and it is difficult for them to carve out time to look back to the lessons learned from the previous project.
- **A key issue is whether the partnership, once established, can continue when the catalyst draws back**. In the Central American experience, new activities were initiated after the catalyst withdrew. The larger producers integrated handwashing promotion in their brand advertising.

The Private Sector Partners
Merging Business and Public Health Goals



This chapter takes an in-depth look at the private sector partners (the soap producers) by . . .

- Reviewing the profile of potential partners.
- Describing the nature of the partnership.
- Enumerating the producers' roles and responsibilities as outlined in the Initiative's memorandum of understanding.
- Describing their activities during the planning, implementation, assessment, and follow-on phases of the Initiative.

In preparation for the Handwashing Initiative, the catalyst team contacted ten soap manufacturers—virtually all the producers in the region. Two were multinationals, two were regional, and the remainder were local companies.

In *Costa Rica* – Punto Rojo (local)
In *El Salvador* – Unisola/Unilever (multinational) and Summa (local)
In *Guatemala* – La Luz (regional), La Popular (local), Productos Finos (local), and Colgate-Palmolive (multinational)
In *Honduras* – Corporación Créssida (regional)
In *Nicaragua* – Ind. Chamórro (local) and Ind. Prégo (local)

Commercial and Public Health Goals

Companies were encouraged by the catalyst to join the partnership for commercial reasons, such as increased sales volume and market share resulting from more frequent handwashing. Joining would also demonstrate good corporate citizenship. The key for the catalyst was to present the public health objectives in a way that made the benefits to the private sector immediately apparent.

From the outset it was clear that the Initiative aimed to merge business and public health goals. As stated succinctly in the memorandum of understanding, the objective of the Initiative was "to promote the habit of handwashing with soap" and "increase the market for soap" (see Annex A). Later, an explicit connection between handwashing and prevention of diarrhea-related infant mortality was made in the Initiative's mission statement:

> *The partnership aims to promote the habit of appropriate handwashing with water and soap by means of an intensive, targeted, educative campaign focused on lowering the incidence of diarrhea to reduce infant mortality among populations at risk in Central America.*

Profiles of the Participating Producers

Five of the companies responded by attending an organizational meeting at their own expense:

- Punto Rojo from Costa Rica
- Unisola/Unilever from El Salvador
- Colgate-Palmolive from Guatemala
- Fabrica La Popular from Guatemala
- Corporación Créssida from Honduras

Table 1. Socioeconomic Targeting of Soaps

		Laundry					Personal care				
Country	**Company**	**A**	**B**	**C**	**D**	**E**	**A**	**B**	**C**	**D**	**E**
Costa Rica	**Punto Rojo**			**x**	**x**	**x**	**x**	**x**	**x**	**x**	
El Salvador	**Unisola/Unilever**						**x**	**x**	**x**		
	Summa							x	x		
Guatemala	La Luz			x	x	x					
	La Popular			**x**	**x**	**x**					
	Productos Finos (PROFISA)							**x**	**x**	**x**	
	Colgate-Palmolive						**x**	**x**	**x**		
Honduras	Corporación Créssida*			x	x	x	x	x	x	x	
Nicaragua	Ind. Chamorro			x	x	x					
	Ind. Prego			x	x	x					

Note: A=Highest; E=Lowest

* Corporación Créssida was acquired by Unisola/Unilever in 2000, expanding Unilever's representation to Honduras and potentially broadening its marketing to classes D and E.

Table 2. Products and Markets of Participating Producers

Company	*Soaps*	*Interest in Initiative*	*Market*
Punto Rojo *Costa Rica*	Full line	Regional collaboration	Primarily Costa Rica but interested in expanding regionally.
Unisola/Unilever *El Salvador*	Three personal care soaps	Prefers an exclusive relationship, but will collaborate regionally.	Local subsidiary of the multinational Unilever group. Recently acquired additional companies in Panama and Belize.
La Popular *Guatemala* (La Popular and Productos Finos are sister companies with one owner)	La Popular produces laundry soap and detergent; Productos Finos produces personal care soaps.	Reservations about working with companies with competing markets.	Wants to position "Jabonito" as a handwashing product aimed at lower socioeconomic groups.
Colgate-Palmolive *Guatemala*	Personal care soaps	Interested in an exclusive relationship only.	Multinational corporation; marketing in all Central American countries.
Corporación Créssida *Honduras*	Full line	Regional collaboration with no reservations.	Primarily oriented toward Honduran market but also works regionally.

The five participating companies represented 72 percent of the laundry soap market and 71 percent of the personal care soap market in the region. The personal care soap was generally not targeted to the groups that the Initiative intended to influence. However, lower-income families do use "laundry soap"—in bars, cylinders, or more commonly, balls (*bola*)—for laundry, dishwashing, bathing, general housecleaning, and handwashing. Thus, an important factor in preliminary meetings with soap producers was to find out to whom they marketed their various brands. Companies selling to lower-income groups in rural areas were favored.

Table 1 shows how the producers target their markets by socioeconomic levels. The highlighted columns are the socioeconomic groups that the Handwashing Initiative was to target. Note that only three of the companies marketed personal care soap to the Initiative's target groups. The others did not market either type of soap to the target groups, shown as "D" and "E."

Table 2 summarizes the information the catalyst team obtained about the soap producers who joined the Initiative.

A Non-Exclusive Partnership

Initially the two multinational soap producers each requested an exclusive arrangement for the regional campaign. However, the catalyst team concluded that public health priorities would be better served by working collaboratively with the whole soap industry. (The companies both participated in the regional effort in the end, although they didn't commit until just before the organizational meeting.)

While an arrangement with a single multinational soap producer with the know-how and resources to run the regional promotional campaign would require less direct technical assistance, such an arrangement would have distinct disadvantages. Some of the larger multinationals concentrate on higher-income consumers (as shown in Table 1), which were not the target of the Handwashing Initiative. Also, involving only one company would have

raised issues of equity and coverage. In a collaborative arrangement, the expertise and resources offered by the catalyst were available to all producers who wished to join. It was hoped that participating in the Initiative would encourage producers to make lasting changes in how and to whom they advertised their soaps. From that perspective, the more firms involved, the better.

"Negative aspects? I could not mention any major one, except that I was sitting at the same table as my competition. But that pales next to the positive things that were born of this program."

—Ileana Quiros, Colgate-Palmolive, Costa Rica

Roles and Responsibilities

The memorandum of understanding outlined the roles and responsibilities of the soap companies for at least the two-and-a-half years of the Initiative.

Participation in the Regional Task Force. Each producer selected a representative, preferably the marketing director, to serve on the Initiative's Task Force. This group, which also included the catalyst team, provided guidance for the effort and its members were the points of contact for both internal and external communications. The list of Task Force responsibilities (see box) makes clear that the group was to make all the major decisions about the nature of the campaign.

The Task Force met seven times from March 1996 to January 1999. Meetings took place at critical decision points in the process. Task Force members paid for their own travel and lodging. The catalyst paid for the meeting space and circulated reports on all the meetings.

Adapting the Initiative's Advertising Concepts. Once the generic advertisements had been created by the advertising agency, the producers agreed to adapt them to their own brands using their own resources for production and dissemination.

Maintaining Communication. Producers pledged to keep in contact with the catalyst team and the other members of the Task Force and to share information that would assist in assessing the impact of the campaign.

Task Force Responsibilities of the Soap Producers

The memorandum of understanding, or Convenio, outlined the following responsibilities:

- Design the general marketing strategy.
- Establish a work plan with dates and responsibilities.
- Identify the information necessary for the market research study.
- Review the market survey questionnaire and advise on methodology.
- Review and analyze the results of the market research study and translate them into a communication strategy.
- Set criteria for selection and offer advice on the selection of an advertising agency.
- Review and approve the generic communication strategy.
- Seek to obtain the participation of the local public sector to broaden the reach of the campaign.
- Launch the campaign using company resources.
- Assist in planning the follow-up market survey.
- Interpret the final results of the communication strategy.
- Advise on the dissemination strategy for each market.

Activities of the Private Sector Partners

The Initiative progressed in the planned sequence, but several issues caused delays that pushed the launch date into the spring of 1998—a year later than originally planned. Even with the delays, the Initiative proceeded at a brisk pace.

Phase One: Conceptualizing the Initiative (January 1995 – January 1996)

The catalyst used input from the soap producers in designing the Initiative. Their willingness to meet with the BASICS' representative and share ideas contributed significantly to the catalyst's assessment of the market potential and company capabilities.

Phase Two: Planning and Development (January 1996 – October 1997)

Producers were involved in planning through their participation in the Task Force. They worked collaboratively to identify the elements of a market survey, develop criteria for selecting a market research firm and advertising agency, formulate an overall strategy, and assist in developing the creative concepts.

In addition to their work on the Task Force, the producers had to carry the Initiative into their firms and integrate it into their marketing plans. Interestingly, when Task Force members were asked to identify potential partners that should be the target of a public relations campaign to boost the Initiative, they identified their own top management as the initial target.

Phase Three: Implementation (March 1998 – September 1999)

Campaigns. Four of the five original firms launched a campaign. Corporación Créssida in Honduras canceled its campaign at the last moment because of internal financial constraints and the devastating effects of Hurricane Mitch.

The campaigns varied widely, as shown in Table 3. (Chapter 7 describes the intervention in greater detail.) In El Salvador, Unisola/Unilever worked closely with the Ministry of Health to complement and strengthen its program for Healthy Schools. In Costa Rica, Punto Rojo leveraged considerable support from the media: Teletica (the major television station) matched the producers' paid advertisements one for one. La Popular's efforts in Guatemala were highly integrated with the activities of its sales force, who distributed samples and materials. Their mobile units—pickup trucks equipped with megaphones—reached many small towns and villages. Colgate-Palmolive focused its initial efforts on organizing a public relations event in April 2000 to recognize the support of a wide range of organizations and make a commitment to continue with the campaign (see Chapter 5). Since then, the company has integrated handwashing messages into the advertising of its best-selling soap, "Protex."

> *"We got the people's good will towards the brand, and this is very important. The media coverage also more than compensated for our efforts."*
>
> *—Jorge Mario Lopez, La Popular, Guatemala*

Implementation Issues. The producers addressed the issue of territorial coverage by agreeing to carry out the campaign in their home markets. This would focus their efforts and avoid overlap that could lead to competition. Punto Rojo was to work in Costa Rica, Unisola/Unilever in El Salvador, Corporación Créssida in Honduras, and La Popular and Colgate-Palmolive in Guatemala, through a segmented approach in which La Popular worked mostly in rural areas and Colgate-Palmolive in urban areas.

In launching their campaigns, producers had to face the issue of brand equity. Companies cannot change the positioning of an established brand unless the change

Table 3. Campaign Activities of Participating Producers

Producer	*Dates*	*Generic/branded*	*Activities*
Punto Rojo *Costa Rica*	May '98 – April '99	Used generic advertisements with brand name.	Printed posters for distribution through World Vision and the Office of the First Lady of Costa Rica; advertised on television and radio and in print; and obtained the agreement of a major television station to double its media investment.
Unisola/ Unilever *El Salvador*	Sept. '98	Used generic advertisements with brand name and logos of Ministry of Health and TV station.	Devoted most of its efforts to collaborating with the Ministry of Health's Healthy Schools Program by providing video, audiotapes, banners, posters, soap samples, and coloring leaflets.
Colgate-Palmolive *Guatemala*	'99 – '00	Generic.	Organized public relations event involving Ministry of Health and media, donated soap to schools, and funded handwashing kit prototype.
La Popular *Guatemala*	Mar. '98 – Oct. '99	Generic with brand logos.	Supported radio advertisements, distributed posters and flyers, and broadcast radio advertisements from mobile units traveling to small towns and villages.

reinforces the brand equity. In other words, an established laundry soap cannot immediately be repositioned for handwashing; nor can the image of a personal care ("beauty") soap be changed to that of a hand soap. Furthermore, creating and building a new brand specifically for handwashing would require a large financial investment and considerable lead time.

Personal-care-only soaps were not sold to the socioeconomic groups that the Initiative sought to reach. What's more, laundry soap producers that reached the target population were reluctant to change the positioning of their established brands, and producers had had bad experiences marketing dual-use soaps. Personal care soaps have a closer connection to handwashing than laundry soaps, which are usually more abrasive. This dilemma was not totally resolved. The producers settled on simply connecting their brand logos or names to the generic advertising spots or printed materials, which communicated the handwashing behavior message but said nothing about type of soap. (Colgate-Palmolive used the advertising concepts of the Initiative in a campaign for "Protex," an antibacterial soap, even though it was targeted at more affluent socioeconomic groups.)

Another brand issue was related to the way advertising resources are allocated by the companies. Funds for the handwashing campaign had to be pegged to a specific brand. The catalyst tried to link the campaign to a best-selling soap, or market leader, to benefit from the substantial resources allocated to such brands. Integrating the handwashing message within the advertising of a major brand with a significant budget (a market leader) would ensure greater impact and sustainability.

Reaching Out to Additional Partners. Producers were also instrumental in encouraging other organizations, both public and private, to get involved in the campaign.

Phase Four: Assessment and Dissemination
(October 1999 – April 2000)

Using results from the evaluation study, producers secured internal support from their organizations to bolster company support for the campaign. In Guatemala, for example, the two companies co-sponsored a public relations event hosted by the MOH in April

2000. At this event, the soap companies and the MOH presented their collaborative plan for two programs—"Healthy Schools" and "Healthy Communities"—which will be implemented over three years.

Follow-on Activities. Colgate-Palmolive developed and launched in 2001 a regionwide educational program for schoolchildren. In addition, Unisola/Unilever plans to launch a handwashing campaign in Honduras, based on its acquisition of Corporación Créssida.

Issues and Lessons Learned

- **A regional approach was preferred over a lengthy country-by-country approach** to take advantage of the regional structure of the commercial partners and the economies of scale for the catalyst. A regional approach also provided better geographic and socioeconomic coverage.
- **A key issue that was never resolved in the Initiative was whether an exclusive agreement would have been preferable to a collaborative approach.** A more common model of private sector collaboration in public health would call for one firm to be selected on the basis of well-developed criteria to produce and distribute a certain product for use by a ministry of health—usually a product that is not widely available at an affordable price. The purpose of the Handwashing Initiative was to change *the way people use* a ubiquitous product. The more firms involved, the wider the behavior change and the greater the benefit to all firms in terms of increased sales. Furthermore, there is synergy in working with a group of producers across a product line. It can encourage project advancement through friendly competition as well as economies of scale in market research and production of campaign materials. In this case, the producers were concerned about working with their competitors, but they joined in because they were afraid to be left out.
- **Encouraging collaboration among firms in fierce competition requires finesse on the part of the catalyst**. Past a certain point, producers may feel that to collaborate is to give away trade secrets. Their desire to keep their plans confidential may run counter to the desire of the catalyst to encourage wider participation and disseminate results.
- **Because of the potential for changes in company leadership to cause delays in the project, it is best not to base the partnership on individual relationships but instead to seek broad-based acceptance of strategies and commitments.** During the Initiative, there were frequent changes in personnel. In a highly competitive industry such changes are not unexpected, but they did present difficulties. The new people had to be briefed on the goals and status of the Initiative. In one instance, a newly assigned marketing director did not know that her firm belonged to the Initiative. The representative from one of the largest producers had to withdraw from the Task Force when he was promoted elsewhere. There was a long delay in assigning a product manager to prepare the campaign launch. Management changes in two other companies had similar effects.
- **The potential for a "clash of cultures" between the different organizations is ever present.** Within the typical catalyst organization, decisions are made through a slow process of developing consensus, whereas businesses are

"The support we got from the health department gave us great credibility. But I believe that the ones who really benefited were the people."

—Gregory Hawener, Unisola/Unilever, El Salvador

more likely to operate through command and control and are able to make decisions and take action quickly. Furthermore, in this case the smaller local soap producers had the flexibility to move rapidly, but the multinational companies had complex approval systems, thorough budget planning processes, and acute concerns about brand quality and positioning.

- **The timing and sequence for involvement of the public and private partners will differ depending on the nature of the partnership and the goals to be achieved.** In the Handwashing Initiative, attempts to engage the public sector and other organizations were postponed until the marketing concepts were fully developed. The private sector partners believed it would be more efficient to ask other partners to participate in a clearly delineated initiative and feared that earlier collaboration would cause delays. One possible source of concern was inherent in the regional design of the partnership, which necessitated involving different public sector officials in each country—a potential cause of delays and a difficult and cumbersome process.

  It must be pointed out, however, that it was easy to postpone public sector involvement because the Initiative could go ahead without licenses or waivers from the respective governments. In some countries, it would have been impossible to take any action without the initial involvement of the public sector.
- **The memorandum of understanding or other document outlining a public-private partnership should not be too prescriptive.** Some involved in the Initiative thought that there should have been a detailed plan that set specific targets for each producer. The prevailing view was that the producers might back away from a partnership if the document formalizing the collaboration appeared too prescriptive.
- **The public-private partnership was a tool for implementing desired behavior change among the soap producers**. The hope is that advertising the health benefits of handwashing will eventually be integrated into the long-term strategy of a specific brand, such as Protex for Colgate-Palmolive and Gold Pro for Unisola/ Unilever. Thus, as the partnership evolves, the Task Force outlives its usefulness. The Initiative will likely be continued as individual company activities.

The Public Sector and Other Partners

Joining Hands with the Soap Producers

This chapter takes an in-depth look at the public sector and other partners by . . .

- Describing the public relations efforts to recruit them.
- Listing who became involved from governments, media, donors, foundations, and others.
- Describing the contributions of these partners to the Initiative.

The Task Force's decision to postpone involvement of the public sector until after the development of the creative concept was not made lightly. The Task Force realized that additional partners might not feel any ownership if they were invited to join too late. On the other hand, if they were invited early, the Task Force would not have enough information to provide concrete ideas about how the public sector and other partners could be involved. After some debate, the Task Force decided that it would be more efficient to await the market research results, develop the communication strategy, and then present the entire package to decision makers and opinion leaders in each country.

Once the planning process was completed, the producers and the catalyst began a continuous public relations effort to recruit other partners to reinforce the advertising campaign and attract additional resources. Recruitment efforts reached out not only to public sector organizations but also to international organizations, NGOs, and other businesses, most notably the media.

Targeted Groups

Four groups were targeted in the public relations effort:

- The public sectors in each country
  - Examples: ministries of health and education
  - Purposes: To provide political support through an official endorsement and to disseminate health messages through health workers and teachers.
- International organizations and NGOs
  - Examples: USAID, UNICEF, World Vision, and CARE
  - Purposes: To diffuse the campaign through their resources and community networks and to increase the depth and coverage of the campaign.
- The mass media
  - Examples: Radio, television, and newspapers
  - Purpose: To disseminate the generic campaign as a public service.
- Other private companies
  - Examples: toilet paper and soap dish manufacturers
  - Purpose: To associate good hygiene practices with the use of their products.

The key groups were the ministries of health, to officially endorse the campaign, and radio and television companies, to disseminate the generic campaign. For the audiences that the Initiative intended to reach—lower socioeconomic groups in isolated rural areas—radio was the preferred medium, then television, and finally newspapers.

The Public Relations Blitz

The catalyst team developed a public relations briefing kit including a briefing paper, the logo of the Initiative, examples of materials, and a customized proposal. The kit was used in individual contacts with potential partners.

A graphics art firm assisted with the development of an eight-page, four-colored brochure (9 inches x 12 inches) with a built-in folder for inserting other documents. It was entitled "Lavo mis manos por salud: una iniciativa multisectorial para salvar vidas infantiles" (I wash my hands for health: a

multisectoral initiative to save children's lives) and featured a photo of a mother and child with soaped up hands. Topics included diarrheal disease; prevention through handwashing; the mission of the Initiative and its membership; the essential messages of the campaign; results of the marketing study about the correlation between proper handwashing and diarrheal prevalence; a description of the campaign materials; and an invitation to join the Initiative.

In February 1998, the catalyst team and Task Force members, each in his or her own country, went on a public relations blitz. With the help of USAID, they contacted company executives and representatives of the media, governmental ministries, and international organizations. They made professional presentations about the rationale for the campaign; showed off the generic materials; and left behind the public relations brochure.

In each country, the ministry of health immediately agreed to support the campaign. The attempt to encourage media participation through donation of free media time and reproduction of tapes and video materials was also quite successful.

The Public Relations Brochure (First Version)

Activities of Public Sector and Other Partners

Additional major partners joined the Initiative just before or during the implementation phase:

- *Ministries of health.* The Ministry of Health was a substantial partner in El Salvador, where Unisola/Unilever supported the ministry's Healthy Schools Program. In Guatemala the MOH created an Office of Hygiene Promotion within its Mother and Child Division.
- *UNICEF*. In Guatemala and El Salvador UNICEF distributed the campaign's generic materials to support its water, sanitation, and hygiene activities.
- *NGOs*. In Guatemala CARE disseminated the handwashing messages, using soap samples and promotional material provided by soap producers.
- *Media.* Although the media partners in Guatemala had not been involved in conceptualizing or planning the Handwashing Initiative, they were the first to step forward to launch the advertising campaign on radio and television. This campaign is scheduled to continue until at least 2003. In Costa Rica a large television channel contributed free generic advertisements during prime time for a year, matching Punto Rojo paid advertisements one for one. A television station in El Salvador contributed free airtime for the generic advertisement. The Guatemalan daily *La Prensa Libre* used vignettes about handwashing as filler.
- *Office of the First Lady of Costa Rica.* This office was instrumental in seeing that handwashing promotion posters reached governmental offices all over the country.

Other partners included PVOs such as World Vision, other businesses, and FUNDAZUCAR, the foundation of the Guatemalan sugar industry (sugar cane growers and refineries), which is the country's largest employer. Table 4 lists all partners and their contributions.

Several donor organizations also contributed to the assessment and dissemination phase of the Initiative. USAID, the World Bank, and UNICEF have supported publication and distribution of this document and are disseminating the findings of the Initiative within their organizations.

"The fundamental reason that made the Ministry of Health take an active role in the campaign was its vast responsibility as health manager. Handwashing, if one looks at it closely, is of vital importance to everyone."

— Almeda Aguilar, Ministry of Health, Guatemala

The Follow-up Public Relations Event

A public relations event was held in April 2000. Organized in Guatemala under the joint sponsorship of Colgate-Palmolive, La Popular, and the local task force, it was an opportunity to publicly recognize the efforts of the various partners in that country. The Ministry of Health hosted the event, which drew many people from governmental ministries and agencies, international organizations, foundations and associations, NGOs, and private sector companies. They were entertained by a choir from a nearby school, whose members sang the campaign jingle and enacted skits about handwashing before the keynote speech of the Deputy Minister of Health.

A second public relations brochure was prepared for this meeting. It carried the logos of all the partners in Guatemala: USAID, La Popular (through the logo for "Ambar," its best-selling laundry soap), Colgate-Palmolive, *La Prensa Libre* daily newspaper, UNICEF, Camara de Radiodifusion de Guatemala, Channel 3, Super Channel, Televisiete (Channel 7), and the Ministry of Health. This second brochure presented the results of the follow-up survey as evidence of the effectiveness of the campaign's approach and outlined proposed campaign activities until 2003.

Issues and Lessons Learned

- **The catalyst has the necessary credibility to communicate effectively with ministry of health officials and should play an active role in recruiting public sector organizations**. Some producers did not feel comfortable contacting health ministries without an intermediary. One producer was reluctant to interface directly with public sector allies, stating that the government would be more receptive to a health-related agency. BASICS therefore assisted in meetings with UNICEF, the Ministry of Health, and education officials to obtain endorsements of the campaign.
- **The public-private partnership needs to be sold to the public sector as an integral part of its national strategy**. If the public sector perceives private sector interest in public health activities as an effort to usurp its prerogatives, unnecessary friction can arise, and the partnership may be jeopardized.

"Who better to work with than those who are responsible for the health of that specific country?"

— Ileana Quiros, Colgate-Palmolive, Costa Rica

- **It is not difficult to attract public sector and other partners to a cause that is obviously good.** The Initiative was

Table 4. Contributions of Public Sector and Other Partners

Partner	*Country*	*Activity*
Public Sector		
Office of the First Lady	Costa Rica	Distributed posters donated by Punto Rojo to health centers, schools, and other state offices and institutions, where they were used in hygiene programs.
Ministry of Health	El Salvador	Distributed educational materials provided by Unisola/ Unilever and used them in the Healthy Schools Program.
Ministry of Health	Guatemala	Created an office of "Hygiene Promotion" within its Mother and Child Division.
Media		
Television, Channel 7 (Teletica)	Costa Rica	Contributed airtime equivalent to Punto Rojo's budget for television commercials.
TCS (channels 2, 4, and 6)	El Salvador	Contributed free airtime during the first month of launch.
Television, channels 3, 7, 11, and 13; radio (Central de Radios y Camara de Radiodifusion Nacional); and daily press (*La Prensa Libre*)	Guatemala	Radio and television stations donated airtime for the generic advertisement provided by BASICS and daily newspaper used generic advertisements as filler when space allowed.
International Organizations and NGOs		
USAID	El Salvador Guatemala Honduras	Facilitated contacts with governments, collaborating agencies, and NGOs; accessed NGO network as a channel for distributing handwashing materials.
UNICEF	Costa Rica Guatemala	Used generic materials in its rural sanitary educational programs and soap samples in handwashing kits.
World Vision	Costa Rica	Distributed posters donated by Punto Rojo.
CARE	Guatemala	Distributed leaflets and soap samples.
NGOs	Costa Rica	Used generic materials in community programs.
FUNDAZUCAR	Guatemala	Introduced handwashing kits and handwashing corners in schools and health centers.

espoused readily by ministries of health and education, media, foundations, and NGOs, not to mention the soap producers. Not all health issues would be so free of political sensitivity.

- **The importance of public health input in a public-private partnership seeking to achieve health goals cannot be overemphasized.** When ministries of health joined in the Handwashing Initiative, the commitment of the private sector partners was strengthened. The epidemiologist on the catalyst team also added authority and credibility. He was able to reassure the producers that the Initiative was built on a solid public health foundation. However, he was not assigned full time to the Initiative. Optimally, an activity of the magnitude of the Handwashing Initiative should have two full-time or almost full-time people assigned to it: one a private sector manager and the other a public health specialist.

Marketing Strategy Development
From Market Survey to Creative Concept

This chapter reviews the planning stage of the Central American Handwashing Initiative by. . .

- Outlining the process for designing and implementing a marketing survey.
- Describing the survey questionnaire.
- Presenting the results.
- Showing how the results were used to develop an overall communication strategy.

The Task Force's first major task was to develop a regional campaign. This work was carried out in a relatively compressed period, from March 1996 to May 1997, with the active participation of most Task Force members. The goal was to develop a generic market strategy based on solid market research.

Consumer Research

The foundation of the communication strategy was a market survey. It provided a profile of the target consumer and was also intended to provide baseline information for use in evaluating the Initiative. The soap producers were no strangers to market surveys. However, the type of survey envisioned for the Initiative was different from those usually conducted by the private sector (which typically include trade audits, store checks, quantitative research, and focus groups). The producers saw in-depth behavioral research as an opportunity to learn about consumers' attitudes and behaviors regarding a then-neglected use of their product: handwashing.

Selecting the Market Research Agency

The producers discussed the information needs for the marketing study, characteristics of the study sample, and criteria for selecting the research agency. Their decisions are summarized in Table 5.

Guided by the producers' criteria, the catalyst selected a market research agency through USAID's competitive process. Bids were solicited from five companies. The agency selected was Generis Latina, a company based in Guatemala with a solid track record in the region and the ability to respond effectively to the client's needs.

Table 5: Framework for the Market Survey

Decision Areas	*Specific Requirements*
Information needs	■ Demographics ■ Socioeconomic status ■ Living conditions (including type of water and sanitation systems) ■ Behavior and attitudes toward handwashing ■ Type of soap used ■ Sources of information about handwashing ■ Diarrheal disease prevalence among children under five
Characteristics of the study sample	■ Mothers of children under ten years of age ■ Drawn from all four countries ■ Stratified urban and rural ■ Socioeconomic status of class "D" or "E" ■ School-age children in household
Selection criteria for market research agency	■ Demonstrated capability of performing a study in all countries ■ High quality sample and information collection methods ■ Ability to conduct study in a timely, expeditious manner ■ Previous experiences in similar studies ■ Reasonable cost ■ Availability of additional data that could be incorporated in the study at no additional cost

Designing and Testing the Questionnaire and Methodology

Four main categories of information were sought through the study:

- Information the Task Force and advertising agency needed about the target audience profile to develop a marketing campaign.
- Baseline information on handwashing practices for subsequent evaluation of the campaign.
- Information on the observed relationships between handwashing behaviors and diarrhea among children for the public health partners to use in advocacy activities and to ensure that key risk factors for diarrhea were addressed in the campaign.
- Information about water sources, availability, storage, and handling that could be used in a future campaign to address household water risks for diarrhea, and, specifically, household water chlorination.

The Task Force reviewed the initial draft questionnaire and methodology presented by Generis Latina. In the next two weeks, the questionnaire was revised, field tested in Guatemala, and revised again based on findings from the field test. Interviewers were trained. Within two months, the fieldwork for the survey had been completed in four countries.

Implementing the Survey

A total of 4,500 households were surveyed: 1,000 each from Costa Rica, El Salvador, and Honduras and 1,500 from Guatemala. A larger sample size was used in Guatemala because of its relatively greater ethnic and geographic diversity. In all cases, the sample size was sufficient to provide a summary descriptive analysis by urban and rural strata and by the main geographic regions of the country with a margin of error of five percent.

The sample was drawn based on clusters selected from updated census tracks categorized as D and E (the lowest socioeconomic levels). Within the clusters, interviewers selected households where there was at least one child age ten years or younger and applied standard criteria to eliminate households that displayed characteristics of a higher socioeconomic level. In Guatemala, each of the four main Mayan language groups was to be sampled, in addition to the Spanish-speaking populations. Ten households were randomly selected from each rural cluster and five households from each urban cluster. All interviews and observations were performed in the house or yard with the mother (or other adult female family member in a small number of cases), the male head of household, and children ages five to 10, when available.

Supervisors for each survey were trained in Guatemala. They, in turn, trained a group of interviewers and local supervisors in each of the four survey countries. The training included conducting pilot interviews before actual data collection began. The catalyst team assisted in the training and field testing in Guatemala and Honduras.

The questionnaire consisted of about 50 items. Interviewees were also asked to demonstrate how they washed their hands and were scored in a structured observation. At the request of the soap producers, children ages five to ten present in the household at the time for the survey were also asked to demonstrate how they washed their hands and to answer questions about when they had washed their hands in the past 24 hours. Table 6 provides some details about the questions asked.[1]

1. A complete copy of the questionnaire can be found on the CD-ROM, *The Story of a Successful Public-Private Partnership in Central America: A Compendium of Resources.* To obtain a copy of the CD-ROM or to find out how to access it through the Internet, contact the EHP Information Center, 1611 North Kent Street #300, Arlington, Virginia 22209, USA.

Table 6. Focus of the Market Survey

Section	*Type of Questions*
Socioeconomic and household characteristics	■ Language ■ Education levels of mother and father ■ Occupations ■ Number, relationship, and age of persons in household ■ Presence of electricity, radio, television, refrigerator
Water availability and usage	Nature of water supply (household connection, community standpipe, well or cistern, etc.) *For households without piped water. . .* ■ Who collects, how often, with what ■ Usage (drinking, washing dishes, washing clothes, handwashing, etc.) *For households with piped water. . .* ■ Hours of availability, outages, scarcity ■ Usage (drinking, washing dishes, washing clothes, handwashing, etc.) *For all households. . .* ■ Location in house where washing activities take place (sink, barrel, wash basin, etc.)
Sanitation	■ Type of sanitation system (toilet, latrine, no system) ■ Who uses
Handwashing	■ A 24-hour handwashing history was taken—from mothers and fathers and children (five to ten years old)—to determine on what occasions (typically before or after some recognizable event) and how many times they had washed their hands during the previous 24 hours ■ Handwashing demonstration: elements of technique observed—one or two hands, cleansing material (soap or ash), number of times rubbed, how dried, cleanliness of drying material (towel or rag)—for mothers and children present at the time of the interview ■ Presence of a handwashing place, defined as soap and water available at a "usual" handwashing place where there is a basin or other arrangement for handwashing water
Soap Usage	■ Use or nonuse (if nonuse, why) ■ Types (laundry bar, laundry powder, and hand soap) ■ What used for ■ If not used for handwashing, why not ■ Where purchased ■ Who in the household makes purchasing decisions ■ Brands used
Attitudes toward handwashing	*Interviewee responds* true *or* false *to a number of statements, for example. . .* ■ "Most times, handwashing with water alone is sufficient." ■ "It is impossible to see that children wash their hands after going to the bathroom unless one is watching them all the time."
Diarrhea prevalence	■ Presence or absence of diarrhea within the previous 14 days as reported by the mother for each child under five in the household
Communication profile	■ Literacy (tested) ■ Exposure to radio, television, print media ■ Preferred programs, times of listening, viewing

Table 7. Observed Handwashing Technique: Percentage of Caretakers with Good Reported Practices and Strength of Association with Lack of Diarrhea in Children under Five in the Household, 1996

	Guatemala	*Honduras*	*El Salvador*	*Costa Rica*	*Total*
Both hands	99*	99	99	99	99
Uses soap	82	90	91	96	89
Rubs at least 3 times	85**	99	88*	88	90*
Dries with a clean towel	28***	37***	40*	69***	42***

*P<.10 **P<.05 ***P<.01

Results

Diarrhea Prevalence and Detailed Analysis of Behaviors

Diarrhea prevalence in the last two weeks among children under five was calculated based on 2,983 surveyed households (in all countries) with a child under five. Overall, 19.3 percent of households reported that at least one child in the household had had at least one day of diarrhea in the two weeks prior to the survey. Prevalence figures varied from country to country: Guatemala – 22.5 percent; Honduras – 24.9 percent; El Salvador – 19.5 percent; and Costa Rica – 7.9 percent. (The survey was conducted during the rainy season when children are most prone to suffer from diarrhea.)

The percentages in tables 7–9 indicate the proportion of those surveyed who reported or demonstrated each of the critical elements of proper handwashing. The number of asterisks (*) indicates the strength of the association with reduced risk of diarrhea in a child under five in the household.

Drying hands with a clean towel had the strongest association with reduced risk of diarrhea of all of the handwashing elements observed (Table 7). At the same time, this was the least prevalent of the three “correct techniques.” The low rates of practice brought down overall rates of both “good practices” and “optimal handwashing.”

The association between washing one’s hands at critical times and reduced risk of diarrhea in children was confirmed, as shown in Table 8.

The findings in tables 7 and 8 were further examined using logistic regression analysis to control for potential confounding factors (country of residence, urban/rural residence, location of source of water, use of sanitary latrine or toilet by all family members, tested ability of the mother to read, and number of children in the household) and to confirm

Table 8. Handwashing Occasions: Percentage of Caretakers with Good Reported Practices and Strength of Association with Lack of Diarrhea in Children under Five in the Household, 1996

	Guatemala	*Honduras*	*El Salvador*	*Costa Rica*	*Total*
Before eating/feeding	50*	77*	64*	56*	61*
Before cooking/food preparation	68**	63	67*	61*	65**
After defecation	65	74*	75	91**	75*
After changing or cleaning baby	29	18*	17	44*	26*

*P<.10 **P<.05

Table 9. Handwashing Place: Percentage with the Necessary Elements Present at the Usual Place of Handwashing in the Household and Strength of Association with Reduced Prevalence of Diarrhea among Children under Five in the Household, 1996

Element	*Guatemala*	*Honduras*	*El Salvador*	*Costa Rica*	*Total*
Water	98	99	99	99	99
Soap	86	94	97*	98*	93*
Basin or place for water to fall	94	89	99*	97	94*
All three elements	82	84*	96**	95**	88**

*P<.10 **P<.05

which of these elements was most commonly linked with reduced risk of diarrhea. In short, observed hand drying with a clean towel and reported handwashing before eating and preparing food were confirmed to have the strongest and most significant relationships with reduced risk of diarrhea.

Interestingly it appears that a dedicated handwashing place is necessary to support the practice of appropriate handwashing at critical times. In three countries and overall, the presence of all three elements at a handwashing place—water, soap, and a basin or place for water to fall—are more important than any one element, including soap alone (Table 9).

The use of soap was not found to have a strong association with reduced risk of diarrhea in this survey. The reason for this finding cannot be determined, but it could be due to changes in behavior under observation (resulting in an over calculation of those who actually use soap) or any number of other factors (Cousens et al. 1996). The importance of using soap to clean hands of microbiological contamination and its association with reduced risk of diarrhea have been demonstrated consistently in the past.

The importance of rubbing hands sufficiently (Hoque et al. 1995, Bateman et al. 1995) was confirmed. The importance of handwashing at times commonly found to contribute to reducing diarrhea risk was also confirmed in these settings, although the associations were not strong.

The results clearly indicated that the communication strategy should address *both* correct technique and critical handwashing times. The results also suggested that the role of a dedicated handwashing place in a household should be explored further.

Overall Stages of Key Behaviors

Of the 4,497 families surveyed in four countries, almost all regularly used and could demonstrate possession of some sort of soap

Table 10. Percentage of those Possessing and Using Soap, Guatemala, 1996

	Hand Soap	*Laundry Soap (Bar)*	*Laundry Soap (Powder)*
Have used in the past month (reported)	90	100	93
Used for handwashing (reported)	85	55	9
Had at the time of the interview (demonstrated)	76	93	69

N= 1500

at the time of the interview. Table 10 presents the data for Guatemala, where soap was least available.

Ideal handwashing behavior was defined in the survey as:

- washing at *three key times* (before cooking or preparing food, before feeding children or eating, and after defecating or changing babies' diapers) and
- with *three correct techniques* (using soap, rubbing hands together at least three times, and drying with a clean towel).

The research segmented the target audience according to three behavior change stages:

- Inadequate practice—technique is inadequate and/or hands are not washed at any of the critical times.
- Intermediate practice—technique is adequate and hands are washed at one or two of the critical times.
- Optimal practice—technique is adequate and hands are washed at all three critical times.

Only 9 percent of the mothers surveyed in the four countries were in the optimal group. (There were marked regional differences: more mothers in Guatemala were in the inadequate group and more mothers in Costa Rica were in the optimal group.) Regionwide, there was room for improvement in the handwashing behavior of about 91 percent of mothers surveyed. Two-thirds of mothers demonstrated poor technique or reported that they had not washed their hands at any one of the three critical times on the previous day—or both. Technique appeared to be less of a problem than timing.

Perhaps the most striking finding was the direct correlation between the number of correct handwashing times and the prevalence of diarrhea among children younger than five. For example, diarrhea prevalence was less than 10 percent among young children whose mothers washed their hands correctly eight times or more during the day, compared to a prevalence of 23 percent among those whose mothers never washed their hands correctly at critical times (see Figure 4 and Table 11).

The finding of a strong association between handwashing and the risk of diarrhea was confirmed by a logistic regression analysis that controlled for variables that had an independent association with diarrhea. As listed above, these variables were country of residence, urban/rural residence, location of source of water, use of a sanitary latrine or toilet by all family members, tested ability of the mother to read, and number of children in the household.

In the analysis shown in Table 11, for example, caretakers at the intermediate step had a 1.5 risk (odds ratio 1.46, 95% confidence interval: 1.15-1.86) of having a child with diarrhea within the past two weeks. Caretakers at the inadequate step had a 2.1 risk (odds ratio 2.14, 95% confidence interval: 1.71-2.68) compared to families at the optimal stage.

Figure 4. Diarrhea Prevalence Among Children by Handwashing Behavior Stage of Surveyed Mothers, 1996 *(all four countries)*

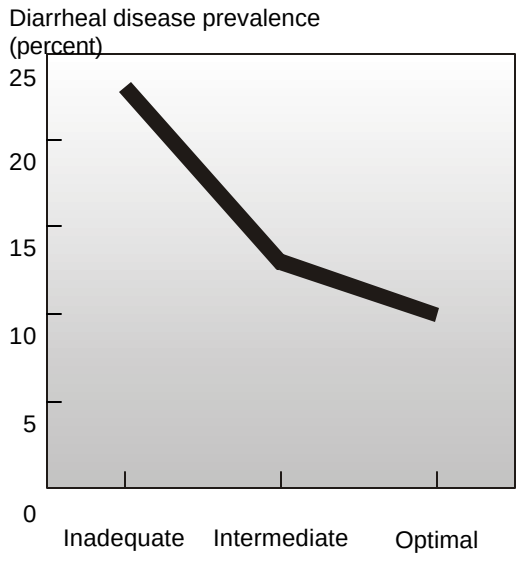


Table 11. Handwashing Behavior Stage of Surveyed Mothers, 1996 *(all four countries)*

Stage	Description: Technique	Description: Critical times	% of those interviewed	Average daily occurrence of correct handwashing	% of children under age 5 having diarrhea
Inadequate	Incorrect and/or ≥	0	65	0	23.1
Intermediate	Good	1 or 2	26	4.5	13.1
Optimal	Good	3	9	8	9.8

N= 4497

Key Attitudes and Constraints

The market survey sought to learn about both positive associations with handwashing and the primary constraints to good handwashing practices.

Specifically, the survey looked at the connection of handwashing to water availability; mothers' perceptions of their own ability to influence children's handwashing behaviors; and perceived connections between handwashing and health.

Caretakers believed in an association between handwashing and good health, but did not think handwashing was sufficient to prevent diarrhea. In Guatemala, 51 percent of mothers said "One gets sick even though we wash our hands often." A basic belief in the importance of handwashing was prevalent in all countries, however. For example, 94 percent said, "People at home always told me I should wash my hands."

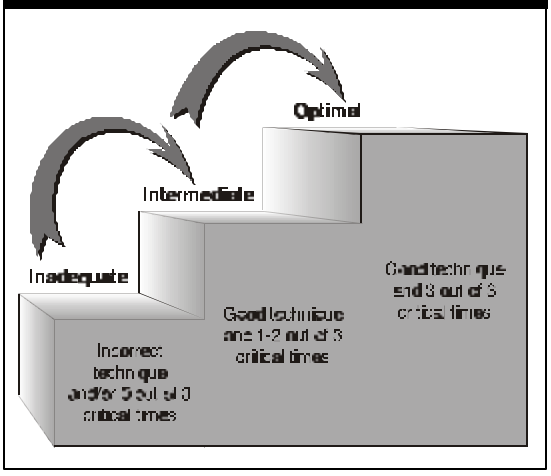
Media Usage

The survey also looked at media use and influence. Eight out of ten mothers surveyed listened to the radio daily—especially in the morning. Television was most common in urban areas, particularly after 6 p.m. Newspapers played a minor role in influencing the target group. Other studies have shown the importance of interpersonal communication to reinforce messages delivered by the mass media.

Implications for the Soap Producers

To the soap producers, the results of the market survey highlighted the potential market for soap. People in the optimal group washed their hands an average of eight times per day. The remaining 91 percent washed their hands zero to five times per day. If the campaign were successful, these people would increase their handwashing by three to five times per day, thus increasing consumption of soap. The strategy adopted was to attempt to move families up the "handwashing steps," incrementally improving handwashing practice and decreasing risk of diarrhea in children (see Figure 5).

Figure 5. Moving Families Up the Handwashing Steps



Advertising Strategy Development

Like the market survey, the advertising strategy was developed by a professional agency hired by the catalyst. Task Force members made decisions on the general thrust and extent of the campaign—deciding to focus advertising on the "how" and "when" and to target those with "inadequate" handwashing behavior (the largest group). They also agreed to focus on healthy children—and specifically prevention of diarrhea—as a positive campaign theme. (Some diarrhea campaigns have used fear or other negative motivators as a basic strategy for promoting changes in practices.)

Advertising Brief

After analyzing in detail the findings of the market survey, the Task Force developed a preliminary marketing strategy, which formed the basis for an advertising brief. The purpose of this brief was to guide the advertising agency in developing messages and concepts. It analyzed the public health problem that the Initiative was to address, described the partnership that had been formed, presented the mission statement, and summarized the results of the market research.

Advertising Slogan and Logo

Selecting the Advertising Agency

BASICS issued requests for proposals to five Central American advertising agencies, following USAID's contracting procedures. The Task Force set the following criteria for selecting the agency:

- Strong creative capability
- Regional scope in Central America
- Neutral, *i.e.*, no accounts with any Task Force member or competitor, to avoid a potential conflict of interest
- Affiliation with a multinational advertising agency to benefit from sophisticated technical support

The third criterion eliminated many top-ranked agencies that might have wished to bid, because of their handling of a soap company portfolio.

The scope of work also specified that the agency chosen would develop the creative strategy but would not place the advertisements. Ad placement was to be handled by the in-house publicity departments of the soap companies. This arrangement was unattractive to the advertising agencies, which usually derive substantial commissions from ad placement. This delayed the submission of an adequate number of bids. Eventually, three companies did submit bids and a Guatemala-based firm, Servicios Estrategicos, was selected.

The original schedule called for selection of an advertising agency by mid-December 1996 for approval by USAID in mid-January 1997. The contract was finally awarded in April 1997.

Developing the Communication Strategy

The catalyst team met with Servicios Estrategicos in late April to develop a communication strategy. The strategy formed the basis for developing materials and ensuring consistency of the message.

Summary of the Handwashing Initiative Communication Strategy

Purpose: *Develop the habit of handwashing with soap and water at critical times using correct technique among mothers of children ages five and under.*

Desired Consumer Response: *"I should always wash my hands with water and soap at critical times, such as after coming in contact with fecal matter and before eating, to prevent illnesses, such as diarrhea, which can cause the death of my children."*

Benefits: *Preventing diarrhea.*

Rationale: *The market research study showed that, among the target population, the risk of diarrheal disease was inversely associated with the frequency of appropriate handwashing.*

Target Groups: *Primary group: Mothers with a low level of education and socioeconomic status who have children under five, principally in the interior of the country. Secondary group: Elementary schoolchildren living under the same conditions.*

Tone: *Project an image that is positive, cheerful, memorable, direct, and natural.*

The Design Concepts

Servicios Estrategicos developed rough design concepts and presented them to the Task Force. The package consisted of a campaign logo and two versions of a campaign, each consisting of a radio spot, a storyboard for a television spot, and a poster. Version one centered on handwashing behavior technique and critical times. It featured a young mother in a rural setting—a typical representative of the primary target audience. Version two conveyed the same message but showed young children washing their hands correctly at appropriate times, as instructed by their mother. Servicios Estrategicos also suggested alternative communication channels, including community activities at fairs or markets, and school activities.

The Task Force approved both design concepts as complementary. The "mother" version would be used for the introductory campaign and the "children" version in a follow-up round. It agreed to pretest the radio spot and poster in Guatemala and Costa Rica—two countries at opposite ends of the region's socioeconomic range. Approval of the creative concept marked the end of the all-important planning phase. The next chapter discusses implementation, beginning with a more detailed description of the advertising campaign.

Issues and Lessons Learned

- **A well-conducted market survey is essential for an initiative of this kind.** It serves two purposes: as formative research to develop a profile of the potential customers and to create a baseline for measuring the impact of the intervention on behaviors. Without such a survey, an advertising campaign cannot be designed or evaluated.
- **The catalyst must be prepared to provide technical backstopping to the market research and advertising firms.** Working with a good local market research firm can be a very efficient way to get a high-quality product. However, market research firms are unlikely to have experience and personnel with prior training in the behavioral aspects of the research required. Examples include handwashing demonstrations, questions about diarrhea, or just about anything to do with children (from selecting households based on the presence of children to enumerating the children in a household and their ages). Specific technical backstopping on the training of survey personnel is essential to ensure a uniform approach and high-quality results. These firms also may be unfamiliar with public-private partnerships and may, for example, need help presenting

information in a way that will be convincing to all partners. Another challenge of working with a market research firm is the compressed time schedule typically allowed for such a survey. Technical assistance and quality control input from the catalyst requires intensive commitment of resources during the planning phase.

- **It is important to establish the communication strategy as the reference document for all advertising designs and media.** Adhering to the communication strategy ensures that clear, consistent messages are conveyed to consumers.

Works Cited

Bateman OM, RA Jahan, S Brahman, S Zeitlyn, SL Laston. 1995. *Prevention of Diarrhea Through Improving Hygiene Behaviors.* ICDDR, B Special Publication No. 42, Dhaka, Bangladesh: International Centre for Diarrheal Research, Bangladesh.

Cousens S, B Kanki, S Toure, I Diallo, V Curtis. 1996. Reactivity and Repeatability of Hygiene Behavior: Structured Observations from Burkina Faso. *Social Science and Medicine* 43(9):1299-308.

Hoque BA, D Mahalanabis, MJ Alam, MS Islam. 1995. Post-defecation Handwashing in Bangladesh: Practice and Efficiency Perspectives. *Public Health* 109(1):15-24.

Shahid NS, WB Greenough 3rd, AR Samadi, MI Huq, N Rahman. 1996. Hand Washing with Soap Reduces Diarrhoea and Spread of Bacterial Pathogens in a Bangladesh Village. *Journal of Diarrhoeal Disease Research* 14(2):85-9.

The Advertising Campaign
The "How" and the "When"

This chapter reviews the implementation phase of the Central American Handwashing Initiative by. . .

- Describing the promotional materials (radio and television spots and posters).
- Recounting how the campaign was implemented in each country.
- Highlighting ongoing activities.
- Reviewing future plans for continuing the campaign.

The implementation phase of the Handwashing Initiative began in October 1997, when all producers in the Task Force received master copies of the campaign materials created by Servicios Estrategicos. The plan was to launch all of the country campaigns simultaneously (in February 1998) for maximum impact. In actuality, launch dates were staggered from March to September 1998.

Description of the Generic Handwashing Campaign

The campaign theme was "Manos limpias, evitan la diarrhea" (Clean hands prevent diarrhea), and its slogan was "Lavo mis manos por salud" (I wash my hands for health). Servicios Estrategicos also designed a campaign logo (shown in Chapter 6) and a mascot, "La Burbujita."

Radio Spots

Based on information from the market survey about media usage, radio was identified as the primary medium for reaching the target audience. Servicios Estrategicos created two spots with easy-to-remember lyrics set to the music of traditional songs that would be known by all family members. The first was aimed at mothers and the second at children. Only the first spot was produced in ready-for-broadcast format. The second was created in non-final prototype format, intended for a follow-up campaign. The spots were as follows:

- Version 1 (finalized): "Uno, dos, y tres" (One, two, and three)—a 30-second spot to the tune of "Cielito Lindo" (a very popular old song transmitted through generations). The mother sings a song telling happily why it is important to wash one's hands at critical times. "Uno, dos, y tres" refers to the three critical times (after going to the bathroom, after changing a baby, and before preparing food) and the three critical techniques (use soap and water, rub hands three times, and dry in the air or on a clean towel).
- Version 2 (prototype): "Dice mi mama" (My mama says)—a 15-second spot with variations to the tune of "Tengo una muneca vestida de azul" (another popular song). The child sings about what his mother has told him. There are three variations: wash before eating, wash after going to the bathroom, and my mama washes after cleaning my little sister. The three aspects of correct technique are also included.

***Burbujita*, the Mascot of the Handwashing Initiative**

Television Spots

Television was the secondary medium. Again, two spots were created. Both were short and upbeat, using actors and contexts the target

population could identify with to portray good health, and featuring the same popular tunes as the radio spots.

- Version 1 (finished master copy): "Uno, dos, y tres," a 30-second spot—similar to version one of the radio spot, presenting the cheerful mother as the authority for maintaining the health of the family as she demonstrates the proper handwashing technique at critical times during the day.
- Version 2 (prototype storyboard): "Dice mi mama," a 15-second spot with three variations, similar to the second version of the radio spot.

Posters

Posters were created to support and reinforce the radio and television campaign. They were to be displayed in public places such as schools, health centers, stores, and pharmacies. One version depicted the cheerful mother carrying out all of the campaign behaviors (the three "techniques" at the three "times"). The poster carried the logo and slogan as well as the main message: "Manos limpias evitan la diarrea."

Task Force members had thoroughly discussed the design elements of the campaign. Hand soap producers wanted a scene showing a modern bathroom sink, while laundry soap producers insisted on a rural setting, showing the *pila* (laundry tub) with laundry hanging on a line in the background. The poster Servicios Estrategicos designed represented the best compromise, targeting the primary audience of rural mothers in socioeconomic categories D and E.

Strategy for Implementation

Servicios Estrategicos gave each of the producers in the Task Force master copies of the advertising materials. These materials could be used as they were for promoting handwashing with no brand identification (a generic campaign). Or producers could associate the campaign with a product by (1) adding the trademark and logo of the product to the materials or (2) incorporating the messages and graphics into a company's own advertisements for a specific brand. The basic implementation strategy of the Handwashing Initiative was to launch a two-pronged campaign in each country: a generic campaign on radio and television (presumably with time donated by media organizations), followed or accompanied by the individual company's brand advertising through mass media, educational activities, and point-of-sale promotion.

The local coordinator prepared a generic media plan detailing the radio-television mix, the number of radio stations, programs, and spots, date of launch, and duration of the campaign for each country, and presented it to the Task Force. For the producers, acceptance of this plan raised issues of ownership, budget, confidentiality, and brand

The Generic Poster

positioning adaptation. Most of them developed their own media plans instead of adapting the generic plan.

Campaign Activities—March 1998 to April 1999

Activities in Costa Rica

Punto Rojo set aside approximately $114,900 to spend on media for the Handwashing Initiative (about $82,400 on television and $26,000 on radio). The company contacted Channel 7 (Teletica), the television station with the widest national coverage (90 percent) broadcasting the most popular programs for housewives. Teletica was so enthusiastic about the campaign that, for every paid announcement, they offered at least one free announcement during prime time.

For the generic campaign, television spots were run on Channel 7, and printed materials and tapes of the radio spots or the poster were distributed to NGOs with direct reach to communities (for example, World Vision). The branded campaign consisted of television and radio commercials of the "Fortuna" brand—an inexpensive toilet soap with high distribution in rural areas—and merchandising through the distributor sales force.

Punto Rojo did not renew the agreement with Teletica when it ended in April 1999. The producer felt that the spot was targeted more to the poorer Central American neighboring countries and that it did not adequately reflect the Costa Rican setting. The producer agreed with the message but preferred a more upscale model in a more urban setting—more in keeping with the local population.

Despite Punto Rojo's reservations, independent media audits indicated that the company's advertising campaign for "Fortuna" in connection with the Handwashing Initiative was one of the country's most active soap advertising campaigns. Thanks to the agreement with Teletica, the campaign outspent even the big names, such as "Palmolive," "Bactex," "Lux," "Dove," and "Gold Pro" soaps, in television advertising.

The Office of the First Lady of Costa Rica also contributed to the campaign by providing a total of 3,500 posters to all government ministries and directorates for distribution to health centers, post offices, and the like. Punto Rojo printed a special batch of posters carrying the logo of the Office of the First Lady along with the "Fortuna" brand logo.

Activities in El Salvador

The Directorate of Social Programs of the Ministry of Health, which had introduced the concept of Escuelas Saludables (Healthy Schools) several years before, expressed interest in the Handwashing Initiative as soon as its director heard about it. Unisola/Unilever had been seeking Ministry of Health endorsement of the handwashing advertising campaign and agreed to put its full effort into a joint arrangement with the ministry. Under the agreement, "Plan de cooperación 'Lavo mis Manos por Salud,' " Unisola/Unilever developed handwashing materials to be used in schools, health centers, prisons, and markets. The school program, which reached 3,500 schools, consisted of educational modules on handwashing for schoolchildren and distribution of "Gold Pro" soap samples, educational posters, banners, and leaflets. Within the health centers, the TV spot was shown as a video in waiting rooms, accompanied by posters and leaflets. The soap company mass-produced materials for distribution to selected schools and health

"We joined the campaign because it involved the company in a social outreach program, something we had not participated in before, and to decrease the number of children who die due to disease."
—Arnoldo del Valle, La Popular, Guatemala

posts. USAID and UNICEF also distributed materials through NGO networks.

Following the positive collaborative experience with Unisola/Unilever, the Ministry of Health reached out to ask Colgate-Palmolive to supply additional soap samples for the school program and to Helsal, a major towel manufacturer.

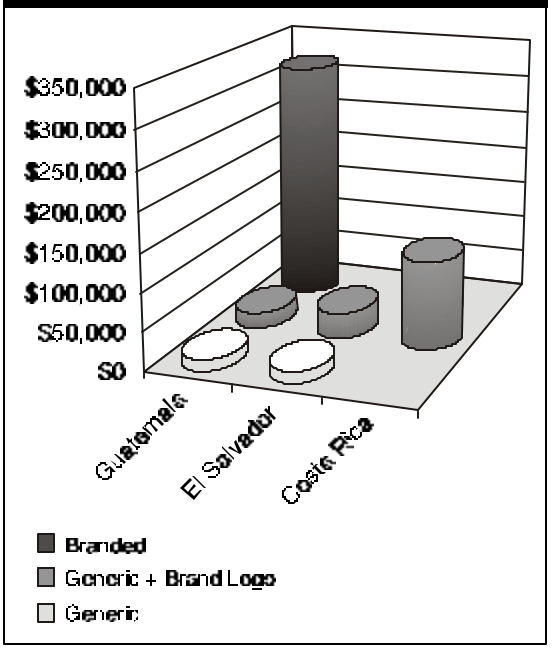
Unisola/Unilever, with the Ministry of Health and the major Salvadoran television broadcasting corporation (TCS—Channels 2, 4, and 6), cosponsored free broadcasting of the generic spot, though only for a limited time. The "Gold Pro" brand advertising on television was preceded and followed by the handwashing message and logo, reinforcing the link between the generic campaign and the brand advertising.

Activities in Guatemala

The campaign was launched in Guatemala in March 1998 with airtime for the generic "Uno, dos y tres" television and radio spots donated by the largest media company and the radio association. The television spot has been aired mostly on Channel 6, the station with the largest audience, and the radio spots have been broadcast in several areas of the country. In addition, *La Prensa Libre,* the largest daily newspaper in the country, agreed to run generic advertisements with handwashing vignettes as filler. The newspaper is also considering other ways to participate, such as reporting on handwashing through interviews of experts in the field and featuring handwashing as a topic in the Sunday children's section. The local coordinator was responsible for contacting the media companies and persuading them to participate in the Initiative.

Two producers, La Popular and Colgate-Palmolive, shared responsibility for the campaign in Guatemala. Colgate-Palmolive was not able to launch its branded campaign during the first year of the Initiative, mainly because of the delay in assigning a new representative when the company's Task Force member was promoted. As of August

Figure 6. Generic vs. Branded Campaign Expenditures in 1998



2001, the advertising agencies of Colgate-Palmolive had developed and begun disseminating handwashing kits in schools.

La Popular launched its activities in May 1998. The company wavered between associating the handwashing campaign with its line of personal care soaps or its line of laundry soaps. The original position was to launch the campaign along with the laundry soaps, where La Popular, with its four brands, holds more than 50 percent of the market. La Popular ultimately followed the BASICS private sector advisor's recommendation to stick with that position because the primary target for the Initiative uses laundry, not hand, soap. La Popular's laundry brands are identified with the campaign—for example, their logos are on the posters—but the messages of the Initiative have not been integrated into the company's advertising. (One "Ambar" advertisement touted the soap's thorough cleaning of clothes but gentleness on hands. Beyond this mild mention, the company did not wish to include dedicated messages on handwashing in its advertisements.)

La Popular carried out field activities through its mobile units, playing the radio spot on a loudspeaker, distributing soap samples and leaflets, and displaying posters around the country. And to celebrate the fiftieth anniversary of "Ambar," the country's leading laundry soap, the company provided 14,000 samples of the soap for handwashing kits for programs in 400 schools—a program also supported by UNICEF.

FUNDAZUCAR, an organization fostering education, health, housing, and municipal development for those working in the sugar cane plantations and plants, introduced handwashing kits and handwashing corners in the schools and centers it sponsors.

Figure 6 compares the implementation of the campaign in the three countries.

Continuing Project Activities

Since the follow-up market survey at the end of 1999, which marked the official conclusion of the BASICS/EHP intervention, producers and other partners have carried out additional activities. These activities are not officially part of the campaign, but grew out of the activities of the partnership and are evidence of sustainability.

- In the aftermath of the earthquake in El Salvador in January 2001, Unisola/Unilever worked with BASICS and the Ministry of Health to launch a promotional campaign to address the high risk of diarrheal disease in communities damaged or destroyed by the earthquake. Through press, radio, posters, calendars, and stickers, the partners conveyed three important messages: disinfect drinking water, wash hands with water and soap at three key times, and wash fruits and vegetables. USAID financed the production of materials, and Unisola/Unilever provided bars of soap and tablets for disinfecting water. The strategy was launched at the community level through the Department of Health. The company has proposed repeating the campaign but focusing exclusively on handwashing.

Protex Handwashing Poster: An Adaptation of the Generic Campaign

- CARE/Guatemala continued to distribute leaflets and place posters in strategic locations.
- Colgate-Palmolive has donated soap and promotional material to the ministries of health in Guatemala, Nicaragua, El Salvador, and Honduras.
- Colgate-Palmolive is using the messages of the handwashing campaign to advertise its antibacterial soap, "Protex," to the general public.
- Colgate-Palmolive has also developed a new regionwide campaign targeting elementary school children in Guatemala, El Salvador, Panama, and Costa Rica. Materials developed for the school program include a handwashing story told by Manolo, a cartoon octopus character, a board game about when to wash one's hands, a poster for classrooms with accompanying notes for

teachers, and a take-home calendar students can use to keep a daily record of when they wash their hands.

- At the April 2000 public relations event, the partnership announced that it had drawn up plans to continue the campaign in Guatemala through 2003. Two types of activities were anticipated:
  - Educate the population about the critical times and techniques for handwashing through television, radio, press, mobile units in local markets, and posters in health centers, hospitals, and schools.
  - Integrate the "Lavo Mis Manos Por Salud" program with the Ministry of Health's National Plan for Healthy Schools and Municipal Health Promoters through:
    - handwashing clinics in markets,
    - handwashing kits for health centers and schools,
    - a "Handwashing Week."

Colgate-Palmolive pledged a donation of 20,000 soap samples and 10,000 posters and stated that it would lead the effort in coordination with the Ministry of Health and other partners.

Other future plans are discussed in Chapter 8 in the section on sustainability.

Issues and Lessons Learned

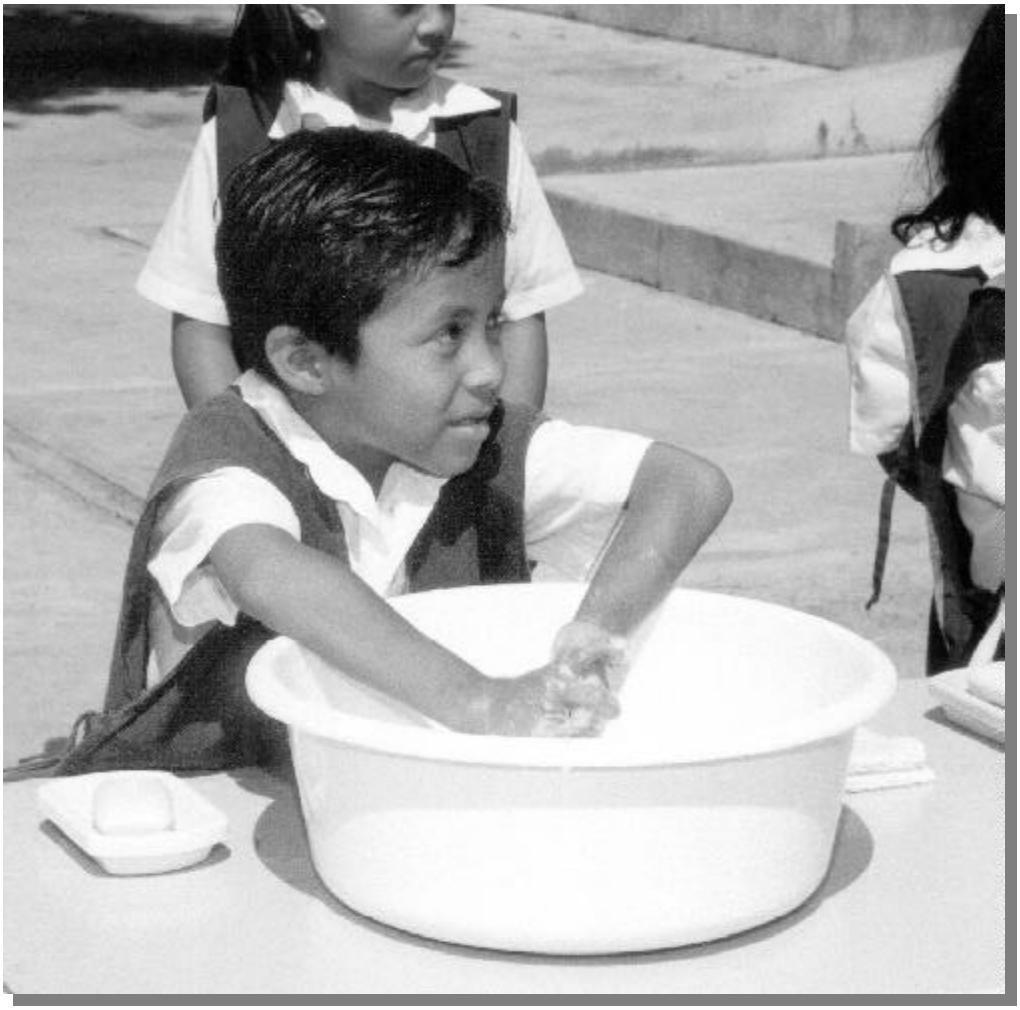
- **The diversity of implementation methods underlines the importance of flexibility on the part of the catalyst.** However, if the methods diverge too sharply, the campaign materials may not

Protex Handwashing Promotion: A Program Targeting Schoolchildren

be completely appropriate. In the case of El Salvador, for example, a school program was adopted, yet the generic materials were clearly addressed to mothers, not children. The constant in all implementation approaches was that the soap companies financed or leveraged funds for the campaign without donor financial support.

- **Internal issues of the soap producers and competitive stresses among them can have a significant impact on the implementation of a regional advertising campaign.** For example, management and personnel changes at two companies slowed down campaign implementation and ruled out a simultaneous launch, which would have generated regional and local momentum. Competitive factors also explain the failure to launch the campaign in a coordinated manner. The smaller firms wanted to wait for the larger firms to launch to benefit from the "tempo" the large firms would create. There was also an element of defensive competition: "I won't launch until the others launch." And regional leaders were afraid of losing their edge: "If I launch in one country, I cannot replicate regionwide because the local firms have the market." There was no leveraging of regional capabilities.

Results
Return on Investments



This chapter reviews the assessment phase of the Central American Handwashing Initiative by. . .

- Describing the assessment efforts—including the follow-up marketing survey.
- Detailing positive results in three categories: public health, resources leveraged, and sustainable change among partners.
- Reviewing the Initiative's results from the soap producers' point of view.

The Central American Handwashing Initiative yielded three kinds of results. Foremost were the public health results—including changes in attitudes and actual handwashing behaviors known to prevent diarrheal disease. To some extent it is also possible to estimate changes in the burden of diarrheal disease itself. Second, the Initiative leveraged considerable resources for handwashing promotion, not only from producers but also from other partners. Finally, the Initiative had a positive and—the evidence suggests—sustainable effect on the organizations that participated in it.

Methods for Assessing Results

Follow-up Market Survey with Beneficiaries

Public health results were assessed by means of a second survey conducted by Generis Latina. The questionnaire was identical to the one used in 1996, with the addition of questions to capture campaign exposure. Due to funding limitations, this follow-up survey was carried out only in Guatemala. There, a total sample of 1,500 households was once again selected within the same clusters that were sampled in the baseline survey. The supervisors and, to the extent possible, survey team members, were the same as those who performed the baseline survey. The second survey was conducted in November 1999, a little more than a year after the launch. Smaller tracking surveys of 500 mothers were conducted in urban areas of Costa Rica and El Salvador to provide information for further development of the campaign in those countries. These surveys were not designed for strict comparison to the baseline, and they differ significantly from the baseline in terms of sample design and implementation.

Generis Latina prepared a report comparing the results of the baseline and final surveys (Evaluación del Impacto Campana Lavo, 2000). Key features of this analysis are presented below.[1]

Interviews with Partners

Partners in the Initiative were also contacted to assess the collaboration. In April 2001, the local coordinator interviewed ten people who had been involved in the Initiative in Guatemala, Costa Rica, and El Salvador (see Annex B). She questioned them on their reasons for involvement, expectations, impressions of the partnership, benefits to their organization, problems and issues, and continuing related activities.

Results

Exposure to the Campaign

The campaign most effectively reached capital-dwelling, non-indigenous populations with access to television, but also reached rural and indigenous populations—albeit at a lower rate (see Table 12). In Guatemala, about 25 percent of the total population recalled campaign messages on the radio—a key element of the strategy for reaching rural indigenous populations via Mayan-language radio stations.

The survey also looked at exposure to "any" messages about handwashing during the

1. The complete report, *Impacto del Campana Lavo Mis Manos por Salud: Reporte Final*, is also available in the CD-ROM, *The Story of a Successful Public-Private Partnership in Central America: A Compendium of Resources.*

campaign period. Because the Initiative encouraged soap companies to promote handwashing but did not dictate exactly how (or even whether) the graphics specifically prepared for the campaign were to be used, it is helpful to look at broader exposure to handwashing messages as well. For example, in Guatemala, exposure to any messages about handwashing during this period was mentioned by 42 percent of those surveyed; in El Salvador, by 49 percent, and in Costa Rica, by 74 percent. The distribution of those exposed (urban vs. rural, indigenous vs. non-indigenous) was similar to the exposure patterns for the campaign-specific messages.

"At a local level, the campaign had a great impact; people were even saying, 'I wash my hands for my health.'"

— Almeda Aguilar, Ministry of Health, Guatemala

Handwashing Behavior

The behavioral objectives of the Initiative were to improve handwashing techniques and increase the frequency of handwashing at critical times. As in the first market study in 1996, the follow-up survey categorized interviewees as being in one of three stages vis a vis good handwashing practice: optimal practices, intermediate practices, and inadequate practices (see Chapter 6).

Figure 7 compares the first and second survey results in terms of handwashing behavior in Guatemala. Considerable progress was made: ten percent moved from the inadequate to the intermediate or optimal stages.

Attitudes Toward Handwashing and Soap

A number of important attitudes improved following the campaign. In Guatemala, for example, the proportion of mothers who said, "One still gets ill even with regular handwashing," fell from 51 percent to 37 percent. The percentage of mothers who agreed with the statement, "We should wash

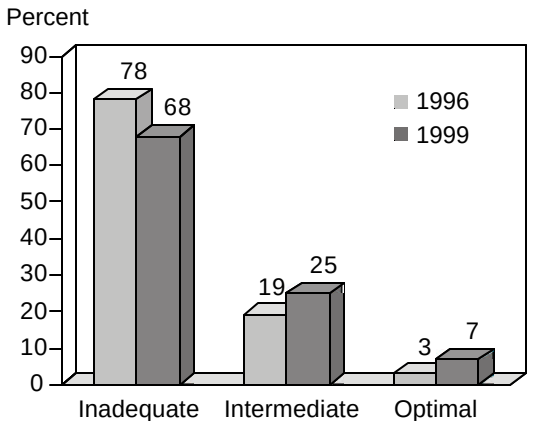
Table 12. Exposure to the "Lavo Mis Manos por Salud" Campaign

Recall "Lavo Mis Manos por Salud" Campaign	*Guatemala (urban & rural)*	*El Salvador (urban)*	*Costa Rica (urban)*
Prompted and unprompted recall of campaign:			
All interviewees	18%	23%	65%
Urban	24%	23%	65%
Rural	14%		
Capital	30%	26%	68%
Rest of Country	15% (rural and urban)	20% (urban only)	63% (urban only)
Indigenous	10%		
Nonindigenous	22%		
Medium recalled:			
TV	70%	81%	97%
Radio	25%	4%	7%
Newspaper	6%	3%	1%
Flyers and Posters	20%	18%	2%

N (Guatemala) = 1500; N (El Salvador) = 500; N (Costa Rica) = 500

Figure 7. Stages of Handwashing Behavior in Guatemala, 1996 and 1999

Handwashing behavior change after 12-month campaign in Guatemala (1500 mothers)



our hands before eating only if our hands appear dirty," decreased from 43 percent to 32 percent. There was also a 10 percent drop in the percentage who agreed that "Most times, washing hands with water is sufficient." At the same time, the number of mothers agreeing with the statement: "When I don't use soap, I feel that I am not clean" rose from 78 percent to 88 percent. Mothers perceiving the multipurpose use of the *bola* soap increased from 39 percent to 50 percent, reflecting the intensive efforts of laundry soap producers to link their brands with the handwashing campaign.

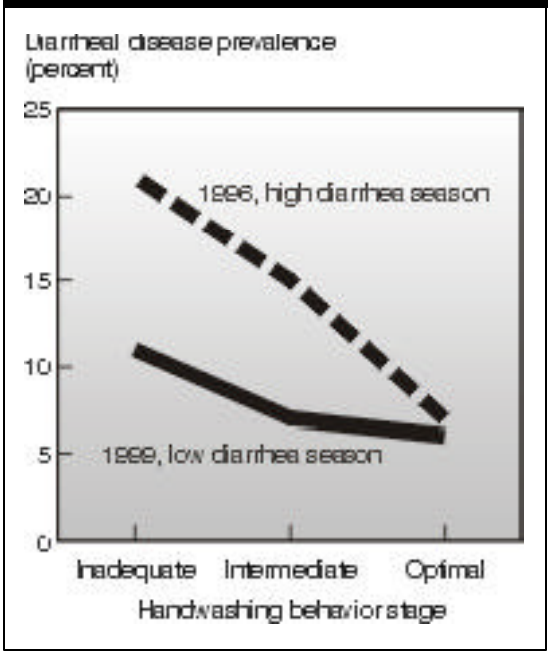
At the same time, changes in attitude were not uniformly positive. For example, in Guatemala there was no reduction in the percentage of mothers who said it was difficult to get their children to wash their hands after going to the bathroom or before eating.

Public Health Impact in Guatemala

As discussed in Chapter 6, diarrheal disease prevalence among children under five was closely associated in the first survey with mothers' handwashing practices. In the second survey conducted in Guatemala, this association was still marked (see Figure 8). The final survey was conducted during a season when diarrhea rates are normally lower. As one would expect, optimal handwashing behaviors were associated with a stable, low prevalence of diarrhea. And, given the reduced risk of diarrhea during this season, intermediate and inadequate behaviors were associated with about half the risk of diarrhea seen in the baseline, which was conducted in the high-diarrhea season.

The improvement in mothers' handwashing behavior in Guatemala between the baseline and follow-up surveys was apparently small, but on a population basis it may have translated into an important public health impact. According to the National Statistics Institute in Guatemala, the total population of under-five year olds in the year 2000 was 1,845,317, and about 85 percent of them lived under the lowest socioeconomic

Figure 8. Diarrhea Prevalence Among Children by Handwashing Behavior Stage of Surveyed Mothers in Guatemala, 1996 and 1999



N =1500

conditions (INE 2000). That means that the changes in handwashing behavior and the corresponding 4.5 percent overall reduction in diarrhea risk[2] had an effect on a large population of under-five year olds—about 1.57 million children. What does this mean in terms of reducing the burden of diarrheal diseases? Some estimates of this impact are presented in the box on this page.

Long-term Effects

The campaign fostered proper handwashing behavior now and with a promise into the future. Mothers modified their behavior to reduce the current rate of diarrheal disease. And as schoolchildren targeted by the campaign become parents, another seed for proper handwashing techniques among future generations will already have been laid. (A similar long-term vision has been realized in Sri Lanka, where an oral hygiene program for children begun 20 years ago by Unilever has been associated with the highest oral hygiene rate in the region—and a strong market for toothpaste companies as well.)

Other Key Findings

Additional findings on exposure to the campaign, changes in attitudes, and other factors emerged from the market survey. Differences in findings among countries are difficult to interpret because the sample design and implementation of the final surveys in Costa Rica and El Salvador differed from those of the baseline in those countries and from both surveys in Guatemala.

- *Handwashing on Critical Occasions:* In Guatemala and urban Costa Rica, there was little change in reported handwashing on critical occasions among the mothers, fathers, and children five to ten years of age, whereas in El Salvador, there was a consistent increase in reported frequency of handwashing on critical occasions among all three groups.
- *Handwashing Technique:* Observed handwashing technique improved significantly among both mothers and children in Guatemala, but there were no such improvements in El Salvador or Costa Rica.
- *Soap Usage:* Reported soap use and demonstrated presence of soap in the household at the time of the interview remained very high and unchanged in all three countries.
- *Movement up the Handwashing Steps:* Overall improvement in handwashing—movement up the handwashing steps (Figure 7)—was significant in both urban and rural Guatemala, but with much greater improvements in urban settings.

Estimates of the Health Impact of the Handwashing Initiative in Guatemala[2]

After one year of the campaign in Guatemala among the 1,572,395 children under five nationwide in the two lowest socioeconomic strata, there were:

- 14,500 fewer children with diarrhea during any two-week period during the rainy (high diarrhea) season
- 7,000 fewer children with diarrhea during any two-week period during the dry (low diarrhea) season
- 322,000 fewer cases of diarrhea a year
- 1,287,000 fewer days of diarrhea a year

Resources Leveraged

A relatively modest level of effort on the part of USAID, through funding to BASICS and EHP, prompted soap companies and media to

2. See Annex C for calculations used to produce these estimates. These estimates were calculated using information in Figures 7 and 8 and population estimates from the National Institute of Statistics of Guatemala (INE 2000), assuming a mean of 4.5 cases of diarrhea per year, with a mean duration of four days per incident case, for children under five in socioeconomic strata D and E in Guatemala.

Table 13. Catalyst Expenditures, 1996-1999

Item	*Description*	*Cost*
Technical assistance	Three technical experts (meet with soap producers and other partners, keep USAID apprised of status of the Initiative, attend Task Force meetings, analyze data, etc.) Approximate level of effort: 70 person days for EHP and 260 person days for BASICS.	$177,000
Travel and per diem		$20,000
Task Force meetings	Facilitators, meeting room rental, refreshments, etc., for seven Task Force meetings.	$6,000
Marketing studies: baseline and follow-up	Contract with Generis Latina	$153,000
Advertising design concept	Contract with Servicios Estrategicos	$33,000
	TOTAL	**$389,000**

Table 14. Leveraged Resources, 1998-1999

Item	*Description*	*Amount*
Guatemala		
Radio (Central de Radios y y Camara de Radiodifusion Nacional)	Donated commercials, May to December 1998, 6,336 spots (198 per week), Guatemala City and the Altiplano	$110,000
Television (Channels 3, 7 11, 13)	Donated commercials, May to December 1998, 589 spots, 18 per week, national coverage	$200,000
Print media (*La Prensa Libre*)	Vignettes in black and white and color, April to December 1999	$5,000
Colgate-Palmolive	Reprinted 10,000 posters for distribution through UNICEF and NGOs, August 1998	$4,000
	Developed protocols for handwashing kits and school program materials (coloring books, flyers), April to August 1998	$10,000
	Donated soap samples	$3,000
La Popular	Radio commercials, October 1998, in Guatemala City and September 1998 to October 1999, mobile unit promotion in the interior of the country	$9,500
	Printing and distribution of 5,000 posters in markets, October 1998	$2,000
	Distribution of banners in markets, September 1998 to October 1999	$1,500
	Donation of 3,000 bars of soap for handwashing kits distributed in Quiche	$1,400
	Printing and national distribution of 10,000 flyers through the mobile units	$2,000
FUNDAZUCAR	Introduced handwashing kits and handwashing corners in schools and health centers	$3,500
UNICEF	Radio commercial, August to October 1998, in the Altiplano	$8,000
	Printing and distribution of posters and handwashing kits in the Altiplano, July 1998	$2,000

spend resources that would not otherwise have been spent on handwashing promotion.

BASICS/EHP expenditures for the Handwashing Initiative totaled $389,000 for technical assistance, travel and per diem, development of the marketing strategy, and market research (baseline and follow-up) from January 1996 to December 1999. Table 13 itemizes these expenditures.

This investment by USAID leveraged an estimated $614,900 for public health in the three countries in just the first year of the campaign. Table 14 itemizes the leveraged resources and puts a dollar value on them.

The information in Table 14 does not provide the whole picture because it presents only the total for one year and does not include ongoing handwashing promotional efforts that began after the official end of the Initiative.

Soap Producers' Evaluation of Results

Key executives from three of the four soap companies involved in the Initiative were interviewed. Their overall impression of the campaign was positive, and two of the producers are involved in activities that grew out of the handwashing campaign.

In the producers' view, the Initiative had numerous pluses:

- *Helping people.* Most often mentioned was the satisfaction of being involved in a campaign designed to help people. The representative from Colgate-Palmolive said that the company views helping communities and governments improve the health conditions of populations as a corporate responsibility. The producers

Table 14. Leveraged Resources, 1998-1999 *(cont'd)*

Item	*Description*	*Amount*
	Work groups distributing handwashing kits in rural communities and schools in the Altiplano, March 1998 to the present	$5,000
	Total for Guatemala	**$366,900**
Costa Rica		
Television - Teletica	Matched Punto Rojo advertisements on TV7, May to December 1998	$82,400
Punto Rojo	Radio commercial, May to December 1998, national coverage	$26,000
	Print advertisements, May to December 1998, national coverage	$3,500
	Printing and distribution (through World Vision and the Office of the First Lady of Costa Rica) of 6,600 posters	$3,000
	Television commercials, May 1998 to April 1999, national coverage	$82,400
	Distribution of soap samples at events	$2,000
	Total for Costa Rica	**$199,300**
El Salvador		
Unisola/Unilever	Distribution of television advertisement via videocassette, Healthy Schools Program (3,500 schools)	$600
	Distribution of radio commercial via audiocassette to 31 health posts	$100
	Distribution of banners to 150 health fairs	$1,000
	Printing and distribution of 30,000 posters, Healthy Schools Program, health posts, and Healthy Markets, and various NGOs	$22,000
	Donation of 25,000 soap samples, Healthy Schools Program, Healthy Markets, and health posts	$15,000
Television (TCS)	Aired commercial during initial launch	$10,000
	Total for El Salvador	**$48,700**
	Grand Total	**$614,900**

also named the public as the major beneficiary of the campaign. Said one: "We genuinely believed in the campaign and its cause. This allowed us to keep in mind at every moment that we were perhaps saving a life."

- *Advantages of working with the public sector and international organizations.* Producers appreciated the value of teamwork and the involvement of the public sector and international organizations. They gave high marks to the level of communication among partners. All remarked that the involvement of ministries of health and organizations such as UNICEF and CARE gave the advertising campaign more credibility—not only with the public but also within their own companies to "sell participation in the campaign." "When we say, 'GoldPro recommends you wash your hands,' it doesn't have the same weight as when the Health Department, USAID, and BASICS say, 'Wash your hands for the sake of your health,'" noted the Unisola/Unilever representative. "We need a partner that can give us some authority so that people will believe what we say." In a similar vein, the Colgate-Palmolive representative said, "What is better than to have the country's health department itself next to you?"
- *The catalyst role.* BASICS/EHP's role as a catalyst was highly appreciated, particularly the ability of the catalyst team to be neutral toward competing companies and a variety of organizations and to react quickly to changing circumstances. The companies recognized that BASICS, in particular, is very interested in private sector collaboration.
- *Increased sales.* The producers made reference to sales but only to say that it is very difficult to tease out what effect the relatively modest advertising campaign of the Handwashing Initiative had. Two producers implied that sales had increased in areas where project activities had taken place. While public-private partnerships are built on the assumption that involvement will benefit the bottom line for commercial firms, it may be a challenge to document the increases because of the sensitivity of such information.

The producers also raised issues and problems:

- *Competition.* The difficulty of working with competitors—even for a good cause—was recognized. Throughout the Initiative certain producers never wavered in their contention that an exclusive arrangement would have been better.
- *Tight resources.* Lack of funds for public service efforts was identified as a problem. Apparently, not all top managers were willing to allocate resources to the campaign unless it was compatible with the positioning of their brands.
- *Lack of follow-up after the formal campaign.* When BASICS/EHP reduced the level of catalyst involvement, the partners were left without a formal coordinator and raised the question of who would step forward to lead the effort. Colgate-Palmolive expressed the desire to keep its national Task Force going with monthly meetings. ("We have enough momentum to keep communicating this simple message in hopes of improving children's health.") Some criticized the government for not remaining more involved or supporting the companies more, with compensation through tax breaks, for example.
- *Creative concept.* The generic advertisement was criticized for not being culturally appropriate in all countries. One producer said, "A Costa Rican woman may not identify with a commercial showing a Guatemalan mother worrying about her son's diarrhea." Another producer felt the generic advertisement was "too heavy with information" and would have been better

with a simpler message. It was mentioned that radio could have been used to better advantage. However, the producers felt that the campaign was generally well targeted to the people in need.

Sustainable Change Among Partners

Effect on the Private Sector

One of the major benefits of the Handwashing Initiative was building awareness among the private sector that public health objectives are compatible with business opportunities. The soap producers learned that soap could be advertised in ways to promote its correct use to achieve health benefits. They also gained valuable experience in reaching out to the media, ministries of health, and other partners.

A vivid example of this new awareness was Unisola/Unilever's response to a devastating earthquake in El Salvador in early 2001. Within a week the company was able to put together an advertising campaign to address the emergency, in partnership with BASICS and the Ministry of Health. The advertisements focused on handwashing with soap at key times in addition to other messages for cholera prevention.

Colgate-Palmolive is launching a regional campaign with elements based "100 percent" (according to a company representative) on the Handwashing Initiative. The plans include a school program in Guatemala, El Salvador, Costa Rica, and Panama to teach children the correct technique, timing, and frequency of handwashing. The program planned to reach 450,000 school children in 2000-2001 and will be extended to Honduras and Nicaragua the following year. The motivation is to replicate the company's experience of the highly successful, 20-year, "Bright smiles, bright futures" oral hygiene campaign with the "Lavos mis manos por salud" diarrheal disease prevention campaign. Colgate-Palmolive planned to invest $150,000 in this program.

Unfortunately, the catalyst has no mechanism for following ongoing activities from a public health point of view. The companies continually monitor their commercial activities in terms of return on investment but are unlikely to assess public health impact.

Effect on the Public Sector and Other Partners

Representatives from the public sector and other organizations were also interviewed and reported that participating in the Handwashing Initiative had a positive effect on their organizations.

- *Increased competence of personnel.* Involvement with the Initiative helped health workers learn to speak easily and clearly about handwashing.
- *Improvements in hygiene programs.* UNICEF Guatemala mentioned that the experience with the handwashing campaign materials was helping the organization to revise the messages in its sanitary and environmental education programs. "The campaign had a single message," the UNICEF official said, "not a volley of messages. 'One, two, and three' is very easy for people to remember and apply. It is a handwashing message stressing practical results." The representative from CARE/ Guatemala said involvement in the campaign had strengthened its program by helping CARE unify its efforts, enabling the organization to respond to one of the Health Department's top priorities, and fortifying work done by its Maternal and Infant Health Program.

"I insist that this campaign be a lasting one, not something that ends abruptly, because through the soap campaign, we are promoting a health change in people's habits."

— Lucrecia Mendez, CARE, Guatemala

- *Creation of new associations and networks.* Involvement as a partner in the Initiative opened up new channels of collaboration that can be used in other efforts. For example, it appears that Unisola/Unilever, the Salvadoran MOH, and BASICS/El Salvador are poised to collaborate in a sustained way to address child health problems.

Several issues were identified by the public sector and other partners that may have limited the success of the Initiative in bringing about sustainable change:

- *Length of the campaign.* As one interviewee remarked, "To talk impact, we have to talk years." The campaign was too short, and BASICS and EHP should have been involved longer. Now, with the two projects playing a very limited role, the ministries and international organizations have to find ways to continue and extend the campaign on their own. Lack of resources may make that difficult. CARE's representative said that the campaign should be a lasting one, not something that ends abruptly.
- *Community involvement.* The Handwashing Initiative did not include a community participation component. There is room for involving key people in the community and people who could serve as models to reinforce handwashing behavior change.

Issues and Lessons Learned

- **The most salient feature of a private sector initiative for public health objectives is that financial and technical support rests with the companies themselves**, and continued activities are not predicated on continued injections of funds and technical assistance.
- **Subsidiaries communicate successful experiences to their headquarters**, which in turn spread messages to the rest of a global network.
- **Even a small improvement on a large scale translates into a big impact, but greater impact may be achieved through broader partnerships.** In Guatemala alone, the national campaign potentially benefited over 1.5 million children, and handwashing improvements were seen at a national scale. The largest previously documented handwashing improvement intervention had a target population of about 60,000 children, and most documented experiences had much smaller populations.
- **Public-private sector partnership can be routinely considered among public health tools.** This experience shows how such a partnership can work. On the other hand, the reduction in diarrhea rates estimated here are much less than those seen in many reported studies. However, this activity does not represent a comprehensive approach either to diarrhea prevention or to handwashing behavior change. What has been demonstrated here is that public-private sector partnerships can play a useful role in promoting handwashing.

  Opportunities for expanding the partnership and achieving greater impact include more participation of NGOs and PVOs (with community-level interventions and more opportunities for interpersonal communication), integration with infrastructure programs, assessment of barriers to handwashing, and inclusion of partners to address those barriers. Additional partnerships can be key to influencing the most affected and difficult-to-reach populations.
- **There are many obstacles to assessing public health impact where the intervention happens at the scale seen here**.
  - Other interventions that may affect the target behavior must be monitored. If they exist to any significant degree, then any evaluation will be difficult.

Likewise, the effects of an intervention can be difficult to distinguish from a secular trend and behavior improvements.

- It is impossible to have a control group with national-level campaigns, so the question of whether any effects on behavior can be attributed to the intervention can never be fully resolved.
- Comparing two surveys with randomly selected populations presents limitations when the real interest is finding out what happened to individuals or families. In the Handwashing Initiative, the real interest was evaluating specifically whether individual families moved from one step to the next in improving handwashing behavior and then trying to discover whether the movement was related to exposure to the intervention. The latter issue implies that a cohort design, perhaps with periodic monitoring of a smaller number of families and a time series analysis, should be considered for the survey. In any event, survey design will present difficulties and tradeoffs. The design used in this activity was chosen because it balanced market research and evaluation needs, could be applied within the available budget by a local firm with limited external assistance, and could be presented to the private sector partners in a format to which they are accustomed.
- While the relationship between handwashing and risk of diarrhea is well documented, demonstrating behavior change alone may not be sufficient for the needs of some partners. The more difficult task of estimating health impact may be necessary for both continued support and advocacy.
- Sufficient support from the public health interests in the partnership must be provided early and consistently throughout the process if an evaluation of public health improvements is contemplated. As noted in Chapter 6, the design and implementation of surveys often moves rapidly when one is working with private sector partners. The public sector and/or catalyst team needs to be prepared to invest resources intensively for a short period of time at the outset to assure that the critical aspects of evaluation design and implementation are sufficiently addressed. Likewise, sufficient support will be needed throughout for the monitoring and final information collection and analysis.

■ **Private companies were unable or unwilling to share information about how their participation in the advertising campaign affected sales.** Thus, it was difficult to document the full impact of the Initiative.

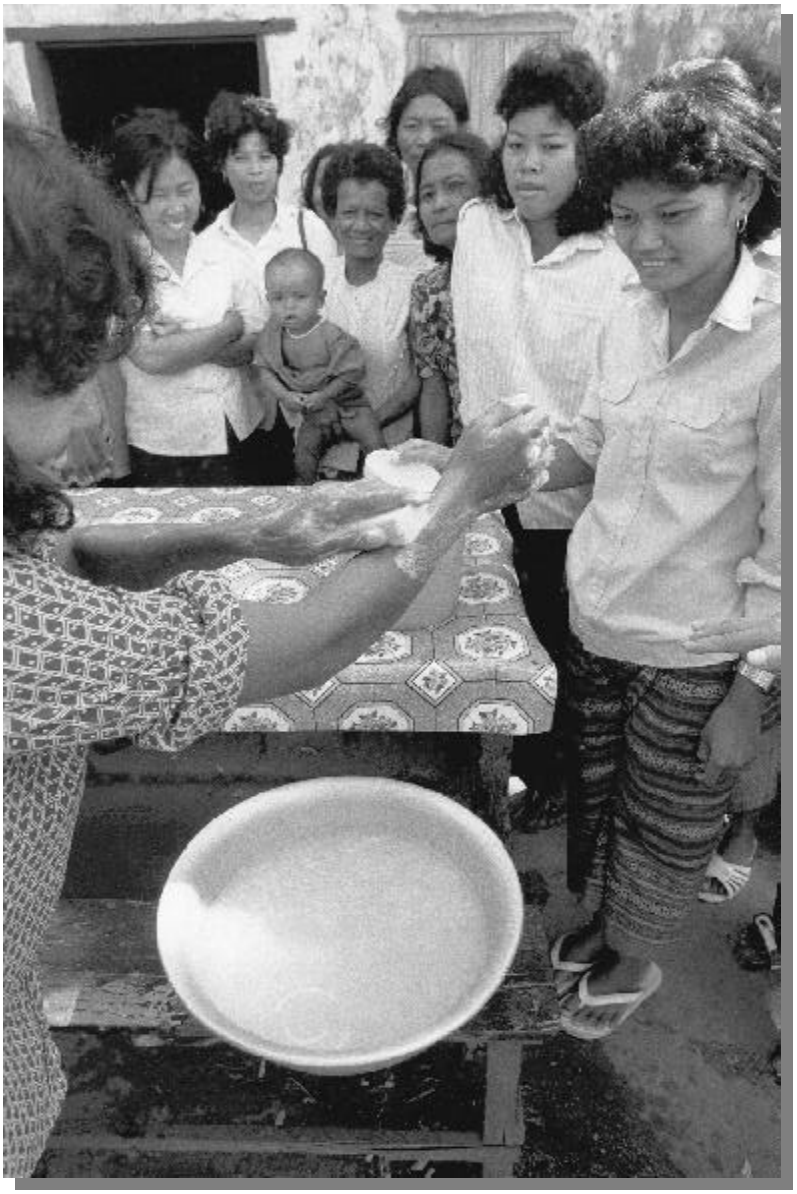
■ **The Initiative tried to integrate handwashing promotion into the budget of a winning brand (market leader).** If handwashing promotion is not part of the promotional program of a market leader, it will not be sustained. If it is integrated into the promotion of a minor brand (with a small budget) it will not have an impact.

Works Cited

Evaluación del Impacto Campana Lavo Mis Manos Por Salud: Reporte Final. 2000. Prepared for Generis Latina de Grupo de Servicios de Información, Guatemala, Guatemala, CA, Febrero.

Encuesta de Ingresos y Gastos (1998-1999) and Population Projections. 2000. Instituto Nacional de Estadística (INE), Guatemala, Guatemala, CA

Key Steps for Replication



This chapter identifies the key elements of the Central American Handwashing Initiative for organizations that may wish to replicate a similar effort by . . .

- Examining overall costs and benefits for the participants.
- Describing the critical path and key actions for replication.
- Identifying "red flag" issues.

The success of the Central American Handwashing Initiative suggests the potential inherent in partnerships that bring the public and private sectors together to achieve complementary goals. Similar efforts in other countries or regions would multiply the resources available to fight diarrheal disease—and many other diseases. The Initiative also suggests that the private sector's techniques for getting messages out can be marshaled to change behavior.

Costs Versus Benefits

An attractive feature of the public-private partnership described in this report is its low cost and high benefits. For reasons described below, it is not possible to put a dollar value on all costs and benefits; however, Table 15 indicates the extent and kind of resources required and the type of benefits obtained.

The catalyst organization underwrote the costs of encouraging and facilitating the participation of the private firms and of carrying out essential planning activities—the market study and creative design. The estimated value of the catalyst's contribution here was $389,000 over four years. This is not an insignificant amount, but, considering the child health benefits—both estimated short-term and potential long-term benefits—it is actually a modest investment.[1]

Costs and benefits from the soap producers' perspective are difficult to estimate. The concept behind the project was to encourage the private sector partners to spend resources that they would spend anyway to advertise soap in a different way (to promote correct handwashing) and expand and open up new markets. The assumption is that the soap producers sold more soap during the Handwashing Initiative—based on the documented increases in handwashing. However, such an increase would be difficult to track, given the size of the companies and their varied product lines. Also, companies may not wish to divulge information about sales increases. (When interviewed, two producers implied that their sales had increased as a result of the campaign.)

The investment of the producers, media, international organizations, and others (estimated at $614,900 in the first year of the campaign alone) may not be large in absolute terms. But it is very large from the point of view of the catalyst and the public sector, which have limited funds to spend on diarrhea prevention. It is not known whether the companies allocated additional resources for the Initiative or simply reassigned resources from their regular advertising budgets.

The principal benefit of the Initiative is the estimated decrease in diarrheal disease prevalence at the end of 1999. However, the campaign has continued since then and will continue through 2003—and perhaps beyond. The documented contribution of the Initiative likely understates its true benefits.

Key Steps for Replication

Table 16 (pp. 70–72) presents the key steps for replicating a public-private partnership for public health. It is aimed mainly at catalyst

1. See Varley et al. 1998 for a discussion of the cost-effectiveness of hygiene activities – including handwashing promotion – compared with other diarrhea prevention and treatment interventions.

Table 15. Costs and Benefits for Partners in the Handwashing Initiative

Partner	*Costs*	*Benefits*
Catalyst	■ Facilitates the partnership. ■ Provides technical assistance. ■ Guides development of advertising strategy and design concept.	■ Leverages resources to achieve organizational goals. ■ Brings about sustainable changes in private sector's advertising messages and approaches. ■ Demonstrates to other potential catalysts and public sector partners, such as ministries of health, the benefits of public-private collaboration. ■ Provides an approach that other organizations can use.
Private Sector	■ Assigns personnel to participate in the Task Force and guide the effort. ■ Implements the advertising strategy (this could be an additional cost or part of the normal advertising budget). ■ Carries out some *pro bono* activities to spread generic message.	■ Increases soap sales. ■ Receives kudos/media recognition for public service in good cause. ■ Creates new alliances with the public sector and other organizations. ■ Learns new methods of marketing research and advertising for behavior change.
Public Sector	■ Assigns personnel to work with private sector. ■ Assists in distributing advertising messages/ materials. ■ Motivates involvement at local level (e.g., public schools).	■ Lowers diarrheal disease prevalence. ■ Learns about the potential of public-private partnerships for public health. ■ Learns new techniques for social marketing. ■ Improves school hygiene programs.
NGOs	■ Assists in distributing advertising messages and materials. ■ Organizes activities at community level.	■ Reinforces healthy behavior at household and community level. ■ Improves and strengthens its own programs.

organizations as initiators and facilitators of the process. The steps reflect the actual experience of the Handwashing Initiative.

The first column of Table 16 shows the critical path of steps and indicates who is responsible for carrying them out. The second column adds detail by listing key decisions or actions for each step. The third column lists issues to be considered when taking the actions or making the decisions.

The Initiative was supposed to have been a two-and-a-half year effort, and that is a reasonable pace for such a project. The planning phase was to take about a year, followed by a year for implementing the campaign, and then six months for assessment. Delays over the selection of the advertising agency and a lag in the launch schedule of the producers postponed the campaign launch about a year.

Table 16. Key Steps for Replication

Critical Path	*Key Decisions/Actions*	*Issues*
CONCEPTUALIZATION PHASE (Nautilus steps 1-3)		
Catalyst conceptualizes project	➪ Selects relevant public health need from epidemiological data, locally or regionally.	Public health need should be met in part through private sector activities.
	➪ Contacts firms; gauges their interest.	Companies should be willing to work collaboratively, if that is the plan. All companies should be invited to participate.
	➪ Assesses competitive market.	There should be room for substantial growth in the market so that companies have an incentive to participate.
PLANNING PHASE (Nautilus steps 4-11)		
Catalyst selects firm(s) to participate.	➪ Selects companies according to transparent and clear criteria**.**	Companies selected should have the capacity to produce and distribute the product economically.
	➪ Holds organizational meeting, sets goals and overall approach.	Transparent participatory meeting norms should be established.
Catalyst and private partners formalize the partnership.	➪ Sign agreement or memorandum of understanding.	Agreement should be flexible enough to accommodate variations in company styles/ goals/resources but specific enough to provide clear direction and focus.
	➪ Establish task force.	The roles and responsibilities and expectations of the partners should be clearly spelled out.
	➪ Develop work plan.	Work should be completed in a compressed time frame to keep up momentum and interest.
Catalyst conducts market research.	➪ Selects market research firm.	The task force should help set selection criteria.
	➪ Reviews draft survey, with Task Force.	Survey must address need for both market research and baseline for evaluation and must be kept to a manageable size to maintain data quality. Market research objectives require more input from the agency and private sector partners; the evaluation objectives are primarily the responsibility of the catalyst.
	➪ Approves survey for implementation.	Intense technical support from the catalyst is needed. Additional technical resources may have to be brought in at significant cost to the catalyst.
	➪ Assists market research agency to implement, analyze, interpret, and present results.	Intense technical support from the catalyst needed to assure the quality of the data and the usefulness of the analysis and presentation to serve both sets of objectives. Results should be presented in a way that is understandable to non-specialists.
	➪ Develops general marketing plan on basis of research, with Task Force.	

Table 16. Key Steps for Replication *(cont'd)*

Critical Path	*Key Decisions/Actions*	*Issues*
Catalyst develops creative concept.	➪ Writes advertising brief, with Task Force participation.	
	➪ Selects advertising agency.	Task Force should help set selection criteria.
	➪ Provides technical assistance to agency during development of creative concept and promotional materials.	The creative concept should be consistent with public health principles and the findings of the research. (The importance of this point cannot be overemphasized if the campaign is to achieve public health goals.) A close relationship between the public health specialist and the task force and private sector partners is needed. Cultural issues should be considered.
	➪ Approves creative concept, with Task Force.	Decisions should be made on use of creative concept for generic and branded advertising.
Catalyst and Private Sector expand the partnership.	➪ Develop strategy for seeking collaboration of additional partners from the public sector and other organizations.	Strategy should be based on comparative advantages of the catalyst and the private firms.
	➪ Design promotional materials or a presentation to use in recruiting other partners.	
	➪ Recruit public sector and other partners: media, international organizations, foundations, NGOs.	Private sector partners should be offered support in dealing with ministries of health and other governmental agencies.
	➪ Carry out a public relations event to recognize partners and publicize the project.	Decisions should be made on when (or whether) to hold an event: before the campaign begins or after the campaign has been completed so that results can be shown?
IMPLEMENTATION PHASE (Nautilus steps 12-13)		
Private and Other Partners implement the campaign.	➪ Plan for a coordinated launch for maximum impact and media saturation.	Internal or external events that might make a coordinated launch impossible should be identified. Ways should be found to keep private companies involved in spite of personnel changes and shifts in company priorities and strategies.
Catalyst monitors implementation.		The catalyst should make every attempt to have a local presence during the monitoring phase. The functions of the catalyst are to: ■ Monitor the campaign activities and level of resources expended by the partners (for evaluation and advocacy). ■ Monitor and support expansion of the partnership. ■ Monitor the content of new activities that spin off from the original campaign (to ensure that the content is consistent with the campaign). ■ Stay in close contact with the partners to assist in identifying and solving implementation problems, including the need for internal advocacy within a company.

Table 16. Key Steps for Replication *(cont'd)*		
Critical Path	***Key Decisions/Actions***	***Issues***
ASSESSMENT PHASE (Nautilus step 14)		
Catalyst conducts assessment activities.	➪ Carries out follow-up marketing survey to evaluate impact.	Follow-up survey should replicate the baseline (sample and instrument design and implementation), with additional questions related to campaign exposure. Follow-up survey should not be carried out until at least a year after the launch of the campaign (optimally after two years of consistent campaign activity).
	➪ Assists market research firm to analyze, interpret, and present results.	Results should be targeted to decision makers, who include: ■ Current and potential new partners—to advocate for engaging in a public-private partnership, ■ Potential catalysts, ■ Task force members and marketing managers of each private sector partner—to assist them in adjusting their marketing strategies.
	➪ Identifies opportunities and designs materials for presenting results to organizations that could serve the catalyst role in the future.	Diverse private and public sector audiences may require a variety of presentations in order for these to be effective.
	➪ Designs mechanisms for incorporating assessment results into development of the model and planning for future activities.	

Issues

At the conclusion of the Handwashing Initiative, several issues were still unresolved. Additional experience with partnerships like the Initiative will shed more light on these issues.

- ***Dynamics of competition***. While the decision was made to work with a group of producers rather than to enter into an exclusive arrangement with one company, not all producers were happy with this arrangement. However, even those who were unhappy did participate. With an exclusive agreement, a producer might feel that there was more to be gained in increased sales and might put forth a greater effort.
- ***Role of Task Force.*** Participation in the Task Force was good at the beginning of the Initiative but fell off precipitously as implementation began. This meant that the catalyst had to travel directly to the firms to get their input and to keep them engaged—a fairly time-consuming process. There are several possible explanations for the drop-off in interest: simple lack of time, lack of interest in sharing information about the campaign with competitors, changes in personnel that brought less engaged members to the Task Force, and loss of momentum due to delays.
- ***Measuring Impact.*** A project operating at the scale of this Initiative cannot measure health impact through an experimental

design that allows for ironclad conclusions on the impact of the campaign. Where the partnership model is highly successful, more and more partners get involved over time and bring an ever more diverse set of activities under the broadest umbrella of the initiative. For example, in the Central American Handwashing Initiative, school programs were not anticipated to be a primary intervention and thus the survey was not well designed to evaluate the effort in El Salvador, which was almost completely oriented to schoolchildren. Diversity in campaigns presents additional challenges, such as ensuring consistency with the content of the campaign and public health goals, describing the numerous activities, and carrying out the follow-up survey. In a dynamic and seemingly organic process of burgeoning partnerships, over time the limits of an initiative can become difficult to define with precision.

- ***Sustainability***. Plans are afoot to continue the handwashing campaign in Guatemala until 2003. However, it will be interesting to see whether the effort will survive the transition as the catalyst team withdraws from an active leadership role. The producers may or may not have a long-term commitment to reorienting some of their advertising dollars for diarrhea prevention or to working with the public sector. That may depend upon how successful the campaign ultimately was in increasing their sales.

"We got the people's good will toward the brand, and this is very important. The media coverage also more than compensated for our efforts. I believe that if we communicated to the rural areas of the country that handwashing was a way to prevent diarrhea, and if this saved a life, we are more than satisfied."

—Jorge Mario Lopez, La Popular, Guatemala

Critical Success Factors

The catalyst team, with the help of other partners, has identified several factors that were critical to the success of the Handwashing Initiative:

- ***Presence of catalyst***. Partners agreed that the public and private sectors could not have been brought together to achieve complementary goals unless BASICS/EHP had assumed the role of catalyst. The catalyst also brought to the table expertise in marketing, public health, and behavioral research and was able to maintain an on-the-ground presence for providing technical assistance, monitoring, and follow-up. Hiring a local coordinator is a crucial element in successful public-private initiatives. Flexible, consistent support for the Initiative was the key.
- ***Good cause.*** There was a natural link between the public health goal and commercial interests. Because the link was strong, both halves of the partnership saw benefits for themselves. This perception of mutual benefits is the linchpin of private sector participation. Media, foundations, and NGOs needed little encouragement to rally around the public health benefits of the Initiative.
- ***Road map.*** The catalyst used a clear, tested approach as a road map for implementing the Initiative (the "Nautilus" model). Thus, all concerned knew how the partnership would evolve. The Initiative kept going partly because all partners had a clear understanding of the main elements and logical progression of steps.

- ***Market research.*** The advertising strategy was based on the findings of market research that included information not only about the actual and potential market for the product but also about the behavior and attitudes of the target population toward the product and the key practice. The research in turn was designed with an understanding of the epidemiology of diarrheal disease and the role of specific behaviors in its prevention. With solid information in hand, it was possible to develop advertising messages that led to behavior change and greater use of the product.
- ***Public health backing.*** The Initiative received the enthusiastic support and endorsement of ministries of health in all four countries, and in El Salvador the ministries of health and education were highly involved in the campaign. This support from public health officials gave the Initiative credibility and reassured the producers that they had made a wise decision.
- ***Roles, responsibilities, expectations.*** The memorandum of understanding ensured that partners' expectations were realistic. It did not specify precisely what resources the producers would provide but was open-ended, making it possible for the producers to take advantage of opportunities as they emerged.
- ***Decision making***. Critical decisions were made jointly so that all partners felt ownership of the project. Some of the group's decisions caused delays, but had the catalyst overruled them, it could have destroyed the whole Initiative. Strong differences of opinion between public and private organizations are to be expected, given their different orientations. Joint decision making was facilitated by transparent processes, clear communication, documentation of agreements, and effective face-to-face meetings.
- ***Timing and sequence.*** The Handwashing Initiative got off to a good start because the catalyst approached the soap producers first, got them involved, and rapidly moved through the planning stage. The effort started small and strategic, later involving additional partners as necessary and useful.

"What we got in return was that people are now aware that we are not only a commercial company, but that we care for the health of the people of El Salvador. The support we got from the health department also gave us great credibility. But I believe that the ones who really benefited were the people."

—Gregory Hawener, Unisola/Unilever, El Salvador

The success of the handwashing campaign in Central America has been attributed to the enthusiastic support of the soap producers and the availability of flexible, timely technical assistance by the catalyst team to keep the process moving along. Given the potential impact of a public-private partnership like the one described here, donor organizations should make every attempt to work with the private sector in the cause of proper handwashing in countries where diarrheal disease continues to be a serious problem, as well as in other areas of common interest and public health need.

Works Cited

Varley, RCG, J Tarvid, and DNW Chao. 1998. A Reassessment of the Cost-Effectiveness of Water and Sanitation Interventions in Programmes for Controlling Childhood Diarrhoea. *Bulletin of the World Health Organization* 76(6):617-631.

Annex A. The Convenio

Agreement Between Private Producers of Hand Soap and BASICS/EHP

We, the undersigned, meeting in Guatemala City, on the first day of March of nineteen ninety-six, have studied the health situation in our countries and the project "PROMOTION OF HANDWASHING WITH SOAP IN CENTRAL AMERICA" promoted by BASICS/EHP and concluded that this helps improve health conditions and has an acceptable design.

Based on our study, WE DECLARE our commitment to participate in the project in a joint and collaborative manner. We have agreed to work for at least 2 years and 6 months (Phase I, Initiation of the Self-sustainable process) beginning on this date. Our participation shall be limited to the statement of Reference Terms, which is included in Appendix No. 1.

Also, we have determined that in order to carry out the project, we shall use the elements of the General Marketing Strategy, which is detailed in Appendix No. 2, "General Marketing Strategy."

Finally, we have established a Task Force. The names of its members and their assigned tasks are shown in Appendix No. 3, "Task Force."

In confirmation of our discussions and decisions, we sign this document, formalizing our commitment to participate.

Appendix 1 of the Agreement

Rules of the Game or Reference Terms

Who should participate in the project?

All institutions whose representative[s] attended the Seminar-Workshop for the Promotion of Handwashing with Soap in Central America project (March 1), plus the representative of Industria Chamorro de Nicaragua, subject to their reconfirmation.

Agreements on the tasks to be carried out jointly:

- Planning and development of the market study
- Planning and development of generic promotional campaign

1. We agree to develop a generic promotional campaign (institutional) for handwashing with soap that does not benefit one specific brand.
2. We agree to seek funding (public and private) for production and dissemination of a campaign.
3. We agree that each company should use the concepts of the generic campaign through the sponsorship of the campaign by product.
4. We agree to jointly conduct a market study funded by BASICS/EHP.
5. We agree to disseminate the experience and follow up the Initiative.
6. The cost for the companies mainly involves launching the campaign (February 1997). It is expected that the cost of the campaign will be reasonable in terms of each company's normal investment in advertising.

Roles and Responsibilities

1. Companies

- Name one representative to the Task Force (commitment to participate, communication link with his company).
- Respect the agreements/rules of the game.
- Share with BASICS/EHP information to help measure the impact of the campaign in a confidential manner.
- Commitment to continue the project in accordance with the general design (2 years and 6 months).

2. BASICS/EHP

Technical role

- Plan, coordinate, and facilitate the activities carried out jointly (including the Task Force).
- Carry out specific technical responsibilities for conducting studies and for the generic communication strategy.

Role with respect to funding

- Market studies
- Development of the generic creative strategy
- Costs of the representatives of BASICS/EHP
- Contribution to the costs of meetings

Support for establishing contacts with the public sector and eventually sources of funding with the objective of reinforcing execution of the generic campaign.

3. Task Force

General role

- Provide guidance, review, and follow-up of the activities that are carried out jointly.

Specific role

- Design the general marketing strategy.
- Establish the work plan.
- Identify the information needed for market studies.
- Review the questionnaire / suggestions on methodology.
- Review / analyze the results of the market study and transfer the results to the communication strategy.
- Establish selection criteria and advise on the research and advertising agencies.
- Review and approve the generic communication strategy.
- Review and approve the generic creative concepts.
- Establish the strategy for involving the public sector.
- Design and review market study no. 2 (similar to no. 1).
- Interpret results in terms of the communication strategy.
- Advise on the dissemination strategy (and active participation).

Methods of carrying out the process:

- Maintain constant communication between BASICS/EHP and other Task Force members via fax and Internet.
- Hold Task Force meetings at critical times (to make decisions) on the work plan.
- The Task Force members are the points of contact for internal and external communication.

Appendix 2 of the Agreement

General Marketing Strategy

Objective

- To encourage the habit of washing hands with soap.
- To expand the market for soap use.

Strategy/direction

- Principal segment socioeconomic level D and below
- All members of the family (men, women, and children)
- Investigate behavior in connection with handwashing with soap

Critical path

1)	Written confirmation of the agreement	March 15, 1996
2)	Market research No. 1	March – July 1996
3)	Evaluation of study results	August 1996
4)	Determination of communication strategy Presentation of other participants	 September – December 1996
5)	Execution – production of campaign material	January 1997
6)	Launch	February 1997
7)	Market research No. 2	March 1998
8)	Evaluation of results	June 1998
9)	Determination of long-term strategy	July 1998

Geographic dimension

All countries in Central America can participate in a coordinated manner.

Coordinating companies by country

GUATEMALA	– Colgate Palmolive / La Popular
EL SALVADOR	– Unisola / Unilever
HONDURAS	– Corporación Créssida
NICARAGUA	– (Chamorro) / Colgate Palmolive
COSTA RICA	– Punto Rojo

Total time of the process

March 1996 – July 1998

Method

- It is preferable to conduct the market research with a company that has regional coverage in Central America.
- The launching of the campaign will be simultaneous.

Appendix 3 of the Agreement

Task Force in Connection with the Agreement

Composition

One representative of each company, one representative of BASICS, and one representative of EHP

Who constitutes the task force?

Ricardo Mejía-Aoun/ Colgate Palmolive – Guatemala

Arnoldo del Valle / Fábrica La Popular – Guatemala

Rafael Chinchilla / Corporación Créssida – Honduras

Viviane Dechamps / Unisola – El Salvador

Federico Quezada / Punto Rojo - Costa Rica

(Representative of Industria Chamorro – Nicaragua)

Massee Bateman / EHP

Camille Saadé / BASICS

Coordinators

Massee Bateman and Camille Saadé

Meetings at critical points

1. Approval of market study questionnaire: The meeting will be held in May or June of 1996. The questionnaire should be sent out before the meeting. The next meeting will be held in Honduras (Tegucigalpa).
2. Evaluation of results: August 1996
3. Establishment of objectives and creative strategy: October 1996
4. Approval of messages, material, and coordination of launch, development of meeting plan for 1997-98: November 1996

Preferred time for meetings: Friday, first two weeks of the month. Provide (at least) two weeks notice.

Draft

Information for Marketing Research

Objectives

1. Establish the profile of the target consumer for a campaign in connection with handwashing with soap.
2. Establish a reference point for handwashing behaviors in the target population.

Characteristics of the sample to be chosen

- Country-wide, in each of the five Central American countries (there may be a regional level under each country)
- Urban and rural
- Class D and below
- Families with small and school-age children

Required Information

1. Socio-demographic characteristics
   - Family structure
   - Level of income
   - Education/children in school
   - Occupation of husband and wife
   - Language spoken at home

2. Living conditions
   - Availability of water (inside or outside the house and how far away)
   - Source of water
   - Storage of water and type of container
   - Electricity
   - Radio or television
   - Latrines or places for defecation

3. Behavior and attitudes towards handwashing
   - Perceived relationship between cleanliness and health
   - Handwashing techniques:
     - Demonstration of six elements: use of water, two hands, soap or other material, rinsing, washing, drying
     - Availability of soap: type, kind
     - Place for handwashing
     - Specific uses of soap
   - Frequency of handwashing
     - Number of times per day
     - At critical times
   - Handwashing behavior of other family members
     - Demonstration with children
     - Number of times
     - Reasons for washing hands
     - Reasons for not washing hands
     - Which other family members wash their hands with soap
   - Impact
     - Presence of diarrhea in children under five in the last two weeks (total number of days)

4. Soap for any use
   - Source for obtaining soap
   - Kind of soap used
   - Where to buy soap
   - Decision-making for buying soap: who buys the soap, who decides
   - Weekly usage of soap
   - Cost
   - Obstacles to obtaining soap

5. Soap for handwashing
   - Preferences with respect to soap for handwashing: size, color, appearance, cost, presentation
   - Reasons for not using soap

6. Information on handwashing
   - Source of information
   - Preferred methods
   - Influences

Annex B. Persons Interviewed

Name of the Contact	*Company*	*Date of the Interview*
Soap Companies		
Ileana Quiros	Colgate-Palmolive, Costa Rica	04-06-01
Arnoldo Del Valle	La Popular, Guatemala	04-06-01
Jorge Mario Lopez	La Popular, Guatemala	04-04-01
Gregory Hawener	Unisola/Unilever, El Salvador	05-02-01
Public Sector		
Lcda. Almeda Aguilar	Ministerio Salud, Guatemala	04-06-01
International Organizations		
Jorge Mario Molina	UNICEF, Guatemala	04-17-01
Stan Terrell	USAID, Guatemala	03-27-01
Dra. Patricia Quinteros	BASICS II, El Salvador	04-17-01
Baudilio López	USAID, Guatemala	04-17-01
Dra. Lucrecia Mendez	CARE, Guatemala	04-05-01

Annex C. Statistical Calculations for Estimates of the Health Impact of the Handwashing Initiative in Guatemala

	Code	Formula	
Total No. Children under five in Guatemala, 2000			1,845,317
Proportion of Children under five in SE levels D and E			0.8521
Total No. Children under 5 in Guatemala in SE Level D and E	**NUM**		1,572,395
Proportion with Diarrhea by Step 1996 (Figure 8)			
1996 Inadequate	**96DD1**		0.21
1996 Intermediate	**96DD2**		0.15
1996 Optimal	**96DD3**		0.07
Proportion with Diarrhea by Step 1999 (Figure 8)			
1999 Inadequate	**99DD1**		0.11
1999 Intermediate	**99DD2**		0.07
1999 Optimal	**99DD3**		0.06
Population Proportion by Step 1996 (Figure 7)			
1996 Inadequate	**96POP1**		0.78
1996 Intermediate	**96POP2**		0.19
1996 Optimal	**96POP3**		0.03
Population Proportion by Step 1999 (Figure 7)			
1999 Inadequate	**99POP1**		0.68
1999 Intermediate	**99POP2**		0.25
1999 Optimal	**99POP3**		0.07
Total No. DD cases, 2 weeks, Hi season, 1996 POP proportions	A	NUM((96DD1*96POP1)+(96DD2*96POP2)+(96DD3*96POP3))	305,674
Total No. DD cases, 2 weeks, Hi season, 1999 POP proportions	**B**	NUM((96DD1*99POP1)+(96DD2*99POP2)+(96DD3*99POP3))	291,207
Total No. DD cases, 2 weeks, Low season, 1996 POP proportions	**A'**	NUM((99DD1*96POP1)+(99DD2*96POP2)+(99DD3*96POP3))	158,655
Total No. DD cases, 2 weeks, Low season, 1999 POP proportions	**B'**	NUM((99DD1*99POP1)+(99DD2*99POP2)+(99DD3*99POP3))	151,736
Total No. Diarrhea cases avoided 2 weeks, Hi season		(A-B)	14,466
Total No. Diarrhea cases avoided 2 weeks, Low season		(A'-B')	6,919
Proportion of Diarrhea cases avoided 2 weeks, High season		(A-B)/A	0.0473
Proportion of Diarrhea cases avoided 2 weeks, Low season		(A'-B')/A'	0.0436
Mean proportion of Diarrhea Cases prevented, High and Low Seasons	**PREVENT**	((A-B)/A)+(A'-B'/A'))/2	0.0455
Total No. Cases per year (@ 4.5 per child under five years of age, SE D&E)		NUM*4.5	7,075,776
Total No. of days of Diarrhea days per year (@ mean 4 days per incident case)		(NUM*4.5)*4	28,303,103
Reduction in number of cases per year		(NUM*4.5)*PREVENT	321,709
Reduction in number of days of diarrhea per year		((NUM*4.5)*4)*PREVENT	1,286,838

Note: The model for calculating the effect of changes in handwashing behavior on diarrhea rates was developed specifically for this activity. It is based on changes in population proportions along behavioral steps and the proportion of children with diarrhea at each step. As the population moves up the "handwashing steps" from baseline to final survey, a higher proportion of the population is in the steps associated with lower rates of diarrhea. These translate into an estimated 4.365 reduction in diarrhea using the 1999 associations between diarrhea prevalence and handwashing steps (low diarrhea season) and a 4.73 percent reduction in diarrhea using the 1996 associations between diarrhea prevalence and handwashing steps (high diarrhea season) for an overall average of a 4.5 percent reduction in diarrhea from 1996 to 1999.

BASICS II

EHP
ENVIRONMENTAL HEALTH PROJECT

unicef
United Nations Children's Fund