

### **I. PSI's Programs in Ethiopia**

Population Services International (PSI)/Ethiopia is the local affiliate of PSI, the world's leading non-profit social marketing organization, which operates in more than 60 countries worldwide. Since 1970, PSI has been working to engage commercial markets to help low-income and vulnerable people meet their health needs. Acting as a bridge between the public and private sector, PSI/Ethiopia creates demand for essential health products and services by using private sector marketing techniques and innovative communications campaigns to motivate positive and sustained changes in health behavior.

PSI/Ethiopia works with the commercial sector to increase the availability of health products and services at subsidized prices that are affordable to at-risk and vulnerable populations (i.e. people living with HIV/AIDS, children under 5, pregnant women). Specifically, PSI/Ethiopia works in the following health areas:

#### ***Malaria***

Consistently ranked among the leading causes of infant death in Ethiopia, malaria poses a significant day to day threat to the livelihood of millions of Ethiopian families. PSI/Ethiopia's malaria program markets 3 brands of insecticide-treated bed nets: PermaNet, SafeNite PermaNet and WobaGasha PermaNet. Each net is marketed to different economic groups and some nets are distributed free of charge to vulnerable populations in rural areas and areas affected by emergencies. PSI/Ethiopia also developed a communication campaign to stress the importance of malaria prevention through radio, television and printed media. In 2004, PSI/Ethiopia distributed and imported over 940,000 insecticide treated mosquito nets and in 2005/6, approximately 3,380 child deaths had been averted.

#### ***HIV/AIDS/STI***

PSI/Ethiopia reaches out to private businesses to implement a Workplace Education Program on HIV/AIDS and STIs (Sexually Transmitted Infections). PSI/E has been providing services such as HIV/AIDS and STI prevention education, and expanded access to treatment, care and support services in 40 large companies. PSI/Ethiopia also markets a range of pre-packaged STI treatment kits containing appropriate antibiotics, condoms, clear instructions and information on STIs and HIV/AIDS, and messages promoting use importance of HIV testing. In 2005/6, 9,400 employees regularly attended peer education sessions; and 26,000 people in surrounding communities were reached with the appropriate educational messages.

#### ***Child Survival***

*Safe water.* Dehydration caused by diarrhea kills approximately 20,000 children every year in Ethiopia, and 40% of the population does not have access to improved water sources such as piped water, protected springs or hand-pumps. PSI/Ethiopia responded by launching an innovative range of point-of-use water treatment systems to minimize water-borne diseases. In 2005/6, more than 380 million liters of water had been treated for safe consumption and 538 child deaths were averted.

- **WaterGuard** is a safe water system developed by the CDC and was launched in Ethiopia in December 2005 under the brand name **WuhaAgar**, Amharic for WaterGuard. WaterGuard reduces the number of diarrhea episodes by around 30% - 50%. One bottle of WuhaAgar treats up to 1,000 liters of water, providing clean water for a typical family for over a month. In 2005/6, PSI/Ethiopia distributed over 744,000 bottles of WuhaAgar.
- **PUR Purifier of Water** was developed by Procter & Gamble and has disinfection capabilities comparable to those of the WuhaAgar product, but also works to clear dirty water. PSI/Ethiopia locally markets PUR as **WuhaAgar Telel**. One sachet of PUR treats up to 10 liters of water. More than 2.7 million sachets of PUR were distributed in 2006.

*De-worming, Zinc deficiency, Iodine Deficiency Disorder and Pneumonia.* PSI/Ethiopia markets de-worming kits, oral rehydration salts (ORS) and zinc tablets, and pneumonia pre-package therapy kits to decrease the morbidity and mortality rates of children under five who are at greatest risk of the parasitic diseases, diarrhea and pneumonia. PSI/Ethiopia also implements a comprehensive mass-media communication campaign to increase the awareness of the dangers of iodine deficiency and promotes the use of iodized salt, as well as educating the public on the benefits of de-worming, zinc tablets and ORS and pneumonia treatments and recognition.

## II. Featured Program Description:

### A. Safe Water– Using Water Purification Systems in Response to Acute Watery Diarrhea (AWD)

In early 2006, several cases of acute watery diarrhea (AWD) affected the Gambella region of Ethiopia and began to spread throughout the country. By the end 2006, the outbreak of AWD reached five regions of Ethiopia (Oromiya, SNNPR, Tigray, Afar, Somali and Addis Ababa Administrative Council), killing 388 people and affecting 32,546 others. AWD, a form of diarrhea is contracted from contaminated water, can simply be prevented by filtering water brought into households from unprotected rivers, ponds, lakes and wells.

Through its ongoing work across the country, PSI/Ethiopia has built relationships with private sector producers, transporters and distributors and was in a good position to leverage such relationships to provide people in the affected region with emergency relief. PSI/Ethiopia responded to the outbreak by scaling up existing activities to increase the use of water purification products that can prevent the spread of water-borne AWD through communication campaigns about proper hygiene and water purification. PSI/Ethiopia distributed free water purification products -- primarily *WaterGuard* -- and also distributed ORS tablets and PUR sachets. In addition, PSI/Ethiopia also developed a strong capacity building component by training local health officials and community agents. The project targeted individuals at risk for AWD living in the affecting parts of Oromiya regional state and the Southern Nations, Nationalities and Peoples Region (SNNPR). These targeted individuals were primarily mothers, as they are most often the care takers of children under five – the most at-risk group for AWD. Other at-risk target groups included pregnant women and people living with HIV/AIDS

Project activities included:

#### 1. Training/orientation and dissemination of community awareness materials

PSI selected approximately 1,000 local community leaders, health workers, and health bureau staff to serve as “Community Agents,” who acted as the primary liaison between PSI and project beneficiaries. PSI organized training/ orientation sessions for Community Agents to focus on safe hygienic practices (hand washing, safe water storage, point-of-use water treatments). Trainees were provided with educational materials, manuals, fliers and samples of water treatment products. All written materials contained user-friendly formats adapted for use in low literacy, rural communities. Community Agents provided educational materials on safe hygienic practices and distributed free WaterGuard products to the target populations.

#### 2. Donation of water treatment products

PSI/Ethiopia distributed 319,600 additional bottles of WaterGuard (enough to treat 320 million liters of water) for free distribution to affected communities by the trained community agents. PSI/Ethiopia delivered products down to the Community Agents, where they distributed the products, free-of charge, to households. PSI/Ethiopia aimed to provide most households in the regions with 2 bottles of WaterGuard, enough to treat up to 2,000 liters of water for 3 months in the household to reduce the risk of diarrhea. PSI/Ethiopia also distributed ORS tablets and PUR sachets to the affected regions.

#### 3. Mobile awareness training

Two new mobile awareness teams, who reach out to populations living in rural and hard-to-reach areas, were established by PSI/Ethiopia to assist health education efforts and community mobilization in collaboration with the regional health bureau staff. These mobile teams focused on areas where people gather, such as market days, and continue to promote safe and hygienic practices as well as the use of water purification systems in the highly affected areas. The mobile awareness teams reached out to its target population in public gathering areas through song, dance and theatre, Question and Answer sessions, poems and interactive sessions.

#### 4. Mass Media Support

With other funding, PSI/Ethiopia had already developed public service announcements in Amharic and Sidamigna languages that are consistent with messages that focus on hygienic behaviors such as hand washing, safe water storage, the importance of treating and preventing diarrhea, and water purification in the household. These were adapted to Oromiffa, a local language mainly spoken in the Oromiya region, and broadcast on national radio to reinforce the messages passed by community workers and the mobile team.

#### 5. Sustainable exit strategy through social distribution of water treatment products

PSI/Ethiopia supplied a further 80,400 bottles of WaterGuard into the surrounding commercial sector for communities towards the end of the emergency project in order to create some sustainability afterwards. Communities continue to have access to water treatment products at just 1.5 birr (approx. US\$0.17) per bottle.

**B. Proposed Budget for Project: Responding to AWD outbreak in Southern Ethiopia (2006)**

DESCRIPTION	YR 1 Cost	Total Cost	Notes
<b>FIELD STAFF</b>	<b>\$4,600</b>	<b>\$4,600</b>	<ul style="list-style-type: none"> <li>• One month - Training/IEC/SWS coordinator</li> <li>• One month – admin/finance manager</li> <li>• One month of logistics clerk</li> <li>• 3 months of 2 product distribution agents</li> </ul>
<b>FRINGES</b>	<b>\$1,748</b>	<b>\$1,748</b>	<ul style="list-style-type: none"> <li>• Local Fringe is charged at 38% of local salaries</li> </ul>
<b>TRAVEL</b>	<b>\$19,050</b>	<b>\$19,050</b>	<ul style="list-style-type: none"> <li>• \$1,833 per month for vehicle rental for training and supervision purposes (6 mo)</li> <li>• \$60 per day for local transportation for distribution (40 days)</li> <li>• \$250 per month per vehicle in operation costs (3 mo., 2 vehicles)</li> <li>• \$250 per month per vehicle in maintenance costs (3 mo., 2 vehicles)</li> <li>• Per diems of \$150 per month for distribution staff (3 mo., 2 distr. staff)</li> <li>• Per diems of \$35 per day incl. hotels for PSI/Ethiopia staff for monitoring visits (50 days)</li> </ul>
<b>CONSULTANTS</b>	<b>\$6,750</b>	<b>\$6,750</b>	<ul style="list-style-type: none"> <li>• Local consultant to be based mainly in the field to oversee project coordination with regions</li> </ul>
<b>COMMODITIES</b>	<b>\$60,000</b>	<b>\$60,000</b>	<ul style="list-style-type: none"> <li>• 400,000 bottles at \$0.15 per unit (including bottling and labeling)</li> </ul>
<b>PROMOTION AND ADVERTISING</b>	<b>\$35,000</b>	<b>\$35,000</b>	<ul style="list-style-type: none"> <li>• Production printed materials – bags, caps, t-shirts etc for distribution agents at \$5 per unit for 1,000 trainees</li> <li>• Placement of radio media - \$150 per spot, 200 spots, national and regional radio</li> </ul>
<b>COMMUNICATION &amp; EDUCATION</b>	<b>\$25,000</b>	<b>\$25,000</b>	<ul style="list-style-type: none"> <li>• Counseling cards for community workers \$1 ea. For 1,000 agents; including production and printing costs</li> <li>• IEC roadshow at \$6,000 per month; 2 shows to be managed simultaneously in 2 regions for 2 months each.</li> </ul>
<b>RESEARCH, MONITORING &amp; EVAL</b>	<b>\$5,000</b>	<b>\$5,000</b>	<ul style="list-style-type: none"> <li>• 2 rounds of TRaC-M surveys for project evaluation</li> </ul>
<b>PROGRAM TRAINING/CONF/MTGS</b>	<b>\$15,000</b>	<b>\$15,000</b>	<ul style="list-style-type: none"> <li>• Training for community agents at \$15 per agent trained (including per diems for trainees and trainers, trainer fees)</li> </ul>
<b>OTHER DIRECT COSTS</b>	<b>\$1,710</b>	<b>\$1,710</b>	<ul style="list-style-type: none"> <li>• Costs associated with running national office, including warehousing, rent and utilities.</li> <li>• One month charged for life of project.</li> </ul>
<b>SUBTOTAL ALL DIRECT COSTS</b>	<b>\$173,858</b>	<b>\$173,858</b>	
<b>OVERHEAD</b>	<b>\$14,386</b>	<b>\$14,386</b>	<ul style="list-style-type: none"> <li>• Admin Fee at 10%, and 5% on procurement costs</li> </ul>
<b>GRAND TOTAL</b>	<b>\$188,244</b>	<b>\$188,244</b>	

### III. Monitoring and Evaluation for featured program

Population Services International strives to measurably improve the health of poor and vulnerable people in the developing world through social marketing of health products and services, and health communications. PSI has decades of experience developing and implementing research tools to consistently track the effectiveness of program interventions and their ability to reach target populations.

PSI employs the world's largest social marketing research unit and is the leading provider of evidence to inform HIV/AIDS, malaria, reproductive health, water/child survival, and nutrition social marketing programs in the developing world. Such research is used to improve the performance of social marketing and communications interventions. Indicators to measure performance include: the effectiveness of interventions in changing preventive behaviors, equity in the practice of those behaviors, and the cost-effectiveness of interventions in terms of the unit cost of delivering outputs per disability-adjusted life years (DALYs)<sup>1</sup> averted. PSI uses the PERForM framework to help guide and conduct research on these performance indicators. The aim of PERForM is to summarize known determinants of behavior and the relationship between behavior and health. Generally speaking, PERForM can be categorized into four levels (goal, purpose, outputs and activities), which incrementally help to better understand and explain behavior change and health status.

PSI/Research uses several Monitoring and Evaluation (M&E) tools to collect and evaluate data. PSI/Research has developed some tools such as TRaC surveys (Tracking Results Continuously), which are surveys of target populations specifically designed to segment, monitor and evaluate social marketing and communications interventions. The rapid feedback about the project's quality allows programmers to adjust and improve activities and/or messages during the length of the project. PSI's MAP (Measuring Access and Performance) tool monitors the coverage and quality of the system used to deliver social marketing products and services. PSI's researchers also use Personal Digital Assistants (PDAs) to collect data on-site and relay information to research sites quickly for evaluation.

In the featured project, PSI/Ethiopia wanted to know several outputs of its project, such as the comprehension of AWD prevention messages of the target population and the use of WaterGuard products by the target populations in the affected AWD areas. In order to do so, PSI/Ethiopia researchers must monitor and measure these outputs by using the TRaC-M survey (Tracking Results Continuously – Monitoring).

The TRaC-M survey, focused on monitoring only, is a research method that monitors exposure to social marketing activities efficiently using lot quality assurance sampling (LQAS)<sup>2</sup>. TRaC-M complements TRaC by providing a low-cost mechanism to monitor indicators, or outputs, in between TRaC surveys for purposes primarily of monitoring exposure to a campaign at a sub-national level. TRaC-M sample and questionnaire sizes are smaller than those of TRaC. In the AWD project, TRaC-M surveys allowed staff to monitor the exposure of AWD prevention messages and marketing of WaterGuard to the targeted audience. The surveys were conducted twice a month to allow staff to track any achievements and/or problems with the project. Results from the first survey allowed staff to re-tailor their project, such as increasing hygiene behavior messages to the targeted communities. PSI/Ethiopia staff also conducted the surveys to determine individuals' (mainly women, as they are primary caretakers of children under five) knowledge about diarrhea, water treatments, WaterGuard and other hygienic behaviors, as well as their actual use of WaterGuard.

The results of the TRaC-M surveys displayed the following positive changes in the project:

- In one region, almost all women had used WaterGuard in their household to treat drinking water and believe that the product is effective in preventing diarrhea.
- Knowledge about water among the surveyed women in all project regions increased throughout the project period. Up to one half of the women acknowledged that not all clear water was safe to drink and could be contaminated.

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<sup>1</sup> DALYs, developed by the World Bank, reflect the total amount of healthy life lost, from any cause, whether from premature mortality or from some degree of disability during a person's lifetime, in a way that can be compared across different types of interventions and across countries. To measure health impact, PSI uses DALYs as an indicator of reduction in the burden of disease as a result of its project.

<sup>2</sup> LQAS is a sampling method used to obtain reliable information using a small sample of individuals in a small geographic area.

- Communication messages about hygienic behaviors had an enormous impact on almost all the women surveyed. While few women in the beginning of the survey washed hands before preparing food, eating and/or feeding a child, the second survey showed almost all women practicing hygienic behaviors.

PSI/Ethiopia is continuing to supply WaterGuard and deliver communication messages of healthy hygienic behaviors of hand washing, water treatments and AWD and water-borne disease prevention via radio, television and communication channels to the three project regional areas.

#### IV. Other Support for Featured Program

Population Services International (PSI), a non-profit organization incorporated in 1970, combines entrepreneurial spirit with social mission to encourage healthy behavior worldwide. Through its health social marketing programs in over 60 countries, PSI distributes affordable, accessible, and attractive health products. PSI raises awareness of health problems and generates demand for the health products it provides through innovative and culturally sensitive communications. PSI's primary interventions concern: family planning, HIV/STI prevention, diarrheal disease, malaria, micro-nutrient deficiencies, and waterborne illnesses.

PSI's Maternal Child Health program primarily focuses on its safe water subprogram, providing powerful tools to people around the world to disinfect their water at point-of-use, protecting them from debilitating and frequently fatal bouts of diarrhea. PSI markets point-of-use safe water products such as WaterGuard and PUR – Purifier of Water, targeted to children under five years of age since they are most susceptible to waterborne diseases. In addition to socially marketing its products, PSI implements comprehensive communication campaigns to educate primarily pregnant women and children about healthy hygiene and diarrhea prevention techniques. In 2006, PSI procured, promoted and distributed approximately 22.7 million units of safe water products and delivered more than 2 million person-years of treated water in developing countries around the world.

Ethiopia has among the lowest levels of safe water and sanitation coverage in the world<sup>3</sup>. Chronic diarrhea, largely attributed to contaminated water, causes approximately a quarter of easily preventable child deaths, and can also prove life-threatening for the over 1.5 million people living with HIV/AIDS<sup>4</sup>. The annual incidence of diarrhea is around 4 to 5 episodes per child, according to the 2005 Demographic and Health Survey, and is higher in rural areas. These areas are significantly higher than the estimated worldwide median of 3.2 episodes per child per year in developing countries<sup>5</sup>.

To combat these figures and decrease the incidence of chronic diarrhea, acute watery diarrhea and other water-borne diseases affecting children under five, PSI/Ethiopia began to socially market two complementary water purification products: WaterGuard and PUR – Purifier of Water to the SNNPR, Oromiya and Amhara regions, where the incidence of water-borne diseases are high. These products can be found in local shops and retail outlets in rural and peri-urban areas in the program's regions. Furthermore, PSI/Ethiopia developed a wide range of interpersonal communication (IPC) materials on diarrhea treatment and prevention, hygiene and safe water that have received the Ethiopian Ministry of Health (MoH) approval, including the use of the MoH logo. IPC materials such as street theatre and interactive sessions have been conducted in villages and marketplaces to reach the target audience of mothers, people living with HIV/AIDS and children. Brochures, posters and other mass media such as radio and television help reinforce the messages to the target audiences.

While PSI/Ethiopia is a fairly new program, – beginning in 2003 -- it is not inexperienced. Following PSI's unique mission to measurably improve the health of poor and vulnerable people in the developing world through social marketing and behavior change communications, PSI/Ethiopia has vast experience in all PSI health programs, including its safe water programs.

PSI/Ethiopia follows PSI's program on social marketing, which is founded on the principle that local communities can and should take an active role in safe-guarding their own health. Products are sold rather than given away, so that people value and have an incentive to use them correctly and consistently. Product sales through community-based organizations, local vendors and service providers necessitates that these local actors govern and manage the storage and sale of products, manage income generated through the sale of products and promote correct and consistent use of the products in order to perpetuate the income-generating activity.

In its safe water programs, in 2006 alone, over 4.4 million safe water solution products were sold in Ethiopia, providing approximately 36,500 DALYs from safe water solution alone. In the month of June 2007, PSI/Ethiopia sold 229,840 bottles of WaterGuard and distributed, free-of-charge, 720 bottles to targeted populations in the program's regions. Since the introduction of safe water products into Ethiopia, PSI/Ethiopia has distributed over 9.1 million units of safe water solution products.

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<sup>3</sup> UNICEF briefing note to the 22 February 2006 WASH Partner meeting, Ghion Hotel, Addis Ababa, Ethiopia

<sup>4</sup> AIDS in Ethiopia: 5<sup>th</sup> Report; Disease Prevention and Control Department of the Federal Ministry of Health, June 2004

<sup>5</sup> The Global Burden of Diarrhoeal Disease, Kosek, Bern & Guerrant, Bulletin of the World Health Organization 2003, 81(3)

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