

**Social Marketing Plus for Diarrheal Disease Control:  
Point-of-Use Water Disinfection and Zinc Treatment  
Project  
(POUZN)**

**Annual Report to USAID  
October 1, 2007 – September 30, 2008**



Abt Associates Inc

In association with:  
Population Services International  
and  
Banyan Global  
Forum One Communications



**USAID**  
FROM THE AMERICAN PEOPLE

**Contract No. GPO-I-00-04-00007-05**

**November 14, 2008**

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## INTRODUCTION

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The POUZN project's objective is to mobilize the private sector for the prevention and treatment of diarrhea through the introduction and scale-up of point-of-use (POU) water disinfection and zinc treatment products.

This Annual Report follows the Workplan format and is organized by the four major Tasks associated with the implementation of the POUZN contract. These include: 1) Work/Business Plan Development, 2) Field Implementation, 3) Global/Technical Leadership and 4) Monitoring and Evaluation. The final section presents a summary budget for the activities described in the workplan. The Annual Report covers the period of October 1, 2007 – September 30, 2008.

Table 1 below provides a summary of the key outputs for the Year Three workplan and their status.

**Table 1: Output Summary for Year 3**

<b>Task One: Work Plan and Business Plan Development and Reporting</b>	<b>Status as of September 30, 2008</b>
Activity A: Workplan Development and Semi-Annual Reporting	
<ul style="list-style-type: none"> <li>▪ Year 3 workplan finalized and Year 4 workplan developed</li> <li>▪ Annual report for Year 2 and Semi-annual report for Year 3 completed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Completed</li> <li>▪ Completed</li> </ul>
Activity B: Work/Business Plans for POU Countries	
<ul style="list-style-type: none"> <li>▪ Work/business plan for expansion/introduction of POU program completed in two countries</li> </ul>	<ul style="list-style-type: none"> <li>▪ Workplan for expanded program in Rwanda completed.</li> </ul>
Activity C: Work/Business Plans for Zinc Countries	
<ul style="list-style-type: none"> <li>▪ Work/business plan for zinc program completed in one country</li> </ul>	<ul style="list-style-type: none"> <li>▪ Work/business plan for Madagascar completed</li> </ul>
<b>Task Two: Program Implementation</b>	
<b>Continuing POUZN POU Programs</b>	
Activity A: Introduce a Safe Water System (SWS) Program in Angola	
<ul style="list-style-type: none"> <li>▪ SWS launched in Luanda and cholera-prone municipalities</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ministry approval received in February. Community launch events commenced in March with official launch in April. Promotional materials developed and distributed. IPC activities being implemented in cholera-prone areas.</li> </ul>
Activity B: Scale-up of PUR program in Democratic Republic of the Congo	

<ul style="list-style-type: none"> <li>Rural distribution of PUR expanded in South Kivu</li> </ul>	<ul style="list-style-type: none"> <li>Commercial distribution network expanded, partners trained, radio spots aired, educational events held, resulting in sales of 205,800 sachets.</li> </ul>
Activity C: Scale-up SWS Program in Haiti	
<ul style="list-style-type: none"> <li>A redesigned SWS product launched in key urban areas</li> </ul>	<ul style="list-style-type: none"> <li>Product arrived in Haiti from new supplier in Miami in February. Distribution commenced in May.</li> </ul>
<ul style="list-style-type: none"> <li>Distribution of SWS to USAID HS2007 sites scaled-up</li> </ul>	<ul style="list-style-type: none"> <li>Distribution of 62,000 bottles to NGO partners and hurricane areas</li> </ul>
<ul style="list-style-type: none"> <li>Community level distribution expanded through work with local NGOs</li> </ul>	<ul style="list-style-type: none"> <li>Focus group discussions to pretest IEC materials completed, media plan prepared and communication agent selected. 518 individuals trained on SWS</li> </ul>
Activity D: Scale-up SWS Program in Kenya	
<ul style="list-style-type: none"> <li>Public, NGO and CBO partnerships scaled up in Coast province to increase reach of behavior change messages and sales in target areas</li> </ul>	<ul style="list-style-type: none"> <li>225 partner personnel trained. 160 new community partners identified. 60 drama groups active. Local IPC activities reached 38,000 individuals.</li> <li>191.3 million liters treated</li> </ul>
<ul style="list-style-type: none"> <li>National retail audit subscription used to improve targeting of POU products</li> </ul>	<ul style="list-style-type: none"> <li>WaterGuard and PUR enrolled in the national retail audit. Results indicated that PSI water treatment products held 75% of urban and 99% of rural markets.</li> </ul>
<ul style="list-style-type: none"> <li>Brand visibility at point of sale improved, particularly in target rural areas</li> </ul>	<ul style="list-style-type: none"> <li>Posters and IEC materials distributed to partners in rural areas. Point of sale materials distributed in Coast region. New radio messages aired.</li> </ul>
Activity E: Scale-up SWS Program in Malawi	
<ul style="list-style-type: none"> <li>SWS expanded to national level, particularly into rural areas</li> </ul>	<ul style="list-style-type: none"> <li>New sales outlets established in rural areas. 492 outlets carry WaterGuard, 192 outlets carry PUR.</li> <li>103 NGO and MoH personnel trained, community-based integrated (IDP) program introduced. Product demonstration efforts intensified.</li> <li>505 million liters drinking water treated</li> </ul>
<ul style="list-style-type: none"> <li>Segmentation strategy and PuR marketing plan implemented</li> </ul>	<ul style="list-style-type: none"> <li>PUR sales focused on institutional programs and cholera-prone areas</li> </ul>
<ul style="list-style-type: none"> <li>BCC/category and brand campaigns implemented for SWS and PuR</li> </ul>	<ul style="list-style-type: none"> <li>New promotional and IEC materials produced to accompany redesigned</li> </ul>

	<ul style="list-style-type: none"> <li>label</li> <li>Redesigned, standardized WaterGuard bottle production completed.</li> </ul>
Activity F: Scale-up SWS Program in Rwanda	
<ul style="list-style-type: none"> <li>SWS program expanded, working through health centers, health mobilization agents and NGOs</li> </ul>	<ul style="list-style-type: none"> <li>New, smaller and more concentrated product being marketed through new commercial outlets, NGO arrangements, health centers, and community-based distributors.</li> <li>224,214 bottles sold from 1241 sales points</li> <li>113 IPC events reach over 46,000 individuals</li> <li>HH survey completed and results disseminated.</li> </ul>
Activity G: Increasing access to SWS in Rwanda through mutuelles de santé	
<ul style="list-style-type: none"> <li>Discounted SWS program for mutuelle members launched in two districts</li> </ul>	<ul style="list-style-type: none"> <li>Mutuelle program launched in Nyagatare district in February and in Rubavu district in April.</li> <li>Over 35,000 bottles provided to mutuelle members</li> <li>Baseline research completed and results disseminated.</li> </ul>
<ul style="list-style-type: none"> <li>Mutuelle and health center staff sensitized and trained on use of SWS and basic hygiene</li> </ul>	<ul style="list-style-type: none"> <li>TOT training of 140 staff completed in January.</li> </ul>
<ul style="list-style-type: none"> <li>Community based sales agents trained to increase awareness of diarrheal disease prevention practices and SWS at the village level</li> </ul>	<ul style="list-style-type: none"> <li>2900 Community-based sales agents trained in the two target districts</li> </ul>
Activity H: Increasing the access of PLWHA to SWS in Rwanda	
<ul style="list-style-type: none"> <li>Program for promotion, marketing and use of SWS by PLWHA designed and implemented</li> </ul>	<ul style="list-style-type: none"> <li>Preparatory activities underway including developing an integrated HIV/Safe Water training module and initial training of health facility staff</li> </ul>
<b>Continuing POUZN Zinc Programs</b>	
Activity I: National scale-up of Zinc Treatments in Nepal	
<ul style="list-style-type: none"> <li>Training of private sector pharmacy personnel in urban and peri-urban centers throughout Nepal completed.</li> </ul>	<ul style="list-style-type: none"> <li>Approval of Phase 2 plans received from MOH April 2008. 4 training providers selected who trained 4,147 chemists in 27 districts.</li> </ul>
<ul style="list-style-type: none"> <li>BCC campaign for zinc as diarrhea case management treatment launched on a national</li> </ul>	<ul style="list-style-type: none"> <li>35,000 radio spots aired on 23 radio stations. Two TV spots aired on 4</li> </ul>

scale to increase consumer demand and disseminate knowledge on correct practices.	stations with national reach. Posters, leaflets and other IEC materials printed and distributed. Billboards installed at 30 district hospitals
<ul style="list-style-type: none"> <li>Local zinc product manufacturing supported through technical assistance from USP.</li> </ul>	<ul style="list-style-type: none"> <li>USP provided TA to 3 local firms, all of whom are actively marketing pediatric zinc products, conducting CME meetings and organizing their own diarrhea treatment campaigns.</li> <li>160,000 treatments sold to retail pharmacies throughout and beyond the 30 target districts</li> </ul>
<b>New POUZN Integrated POU and Zinc Program</b>	
Activity J: Introduction of POU and DTK Programs in Benin	
<ul style="list-style-type: none"> <li>Products procured, marketing plan developed and program to market chlorine tablets for the point-of-use provision of safe water launched</li> </ul>	<ul style="list-style-type: none"> <li>Marketing plan completed, media campaign materials developed, Branded and generic radio spots aired, and product launched in September.</li> <li>300,000 liters of water treated in September alone.</li> </ul>
<ul style="list-style-type: none"> <li>Products procured, marketing plan developed, and a program to market diarrhea treatment kit launched</li> </ul>	<ul style="list-style-type: none"> <li>Products procured, marketing plan completed and product launched in two of seven target departments at the end of March. National launch in June in additional five departments.</li> <li>200,616 diarrhea treatment kits sold.</li> <li>Technical advisor approved by USAID joins team in April.</li> <li>Over 800 educational sessions held.</li> </ul>
<b>New POUZN Zinc Program</b>	
Activity K: Initiation of Zinc Treatment Program in Madagascar	
	<ul style="list-style-type: none"> <li>Workplan approved in January 2008, products ordered, trademarks registered, pictorial use instructions developed and pretested, media materials developed.</li> <li>Integrated IMCI community health worker training developed with UNICEF, BASICS and MOH.</li> <li>Agreements signed with NGO partners.</li> <li>Launch planned for January 2009.</li> </ul>

<b>New POUZN POU Programs (funds permitting)</b>	
Activity L: Initiation of SWS/PUR/POU program in up to two countries	
<ul style="list-style-type: none"> <li>▪ SWS, PUR or Tabs launched/scaled up (e.g. Nigeria, Ethiopia, or DR Congo)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Agreement reached with USAID to focus on existing programs.</li> </ul>
<b>Technical Assistance</b>	
Activity M: Technical Assistance provided on zinc and POU	
<ul style="list-style-type: none"> <li>▪ Technical assistance provided to programs on an as-needed basis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Technical assistance provided in the finalization of training materials and marketing strategies for Benin's POU and zinc programs.</li> <li>▪ Technical assistance provided to local SurEau manufacturer in Rwanda to address supply issues.</li> </ul>
<b>Task Three: Global Leadership and Dissemination</b>	
Activity A: Documentation of Country Programs	
<ul style="list-style-type: none"> <li>▪ Additional case study on lessons learned through the implementation of POU and zinc programs prepared</li> </ul>	<ul style="list-style-type: none"> <li>▪ Relevant topics under discussion</li> </ul>
<ul style="list-style-type: none"> <li>▪ Three country briefs completed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Country briefs on Malawi, Rwanda and Nepal in draft</li> </ul>
Activity B: Increase Visibility of POUZN among USAID and international audiences	
<ul style="list-style-type: none"> <li>▪ Participation at key conferences (GHC, Household Water Network Meeting etc.)</li> </ul>	<ul style="list-style-type: none"> <li>▪ POUZN staff participated in both GHC and HH Water Network in Ghana</li> </ul>
<ul style="list-style-type: none"> <li>▪ At least one paper on POU and/or zinc presented at international meeting</li> </ul>	<ul style="list-style-type: none"> <li>▪ Three abstracts submitted, one accepted for presentation at GHC. Two abstracts submitted and accepted for presentation at HH Water Network Meeting.</li> </ul>
Activity C: Increase Visibility of POUZN through Electronic Media	
<ul style="list-style-type: none"> <li>▪ Information on POUZN activities/results disseminated</li> </ul>	<ul style="list-style-type: none"> <li>▪ Results of zinc program evaluation in Cambodia disseminated through website</li> <li>▪ Press release/highlight on DTK launch in Benin</li> <li>▪ Baseline research on POU use among mutuelle members disseminated through website</li> </ul>

<b>Task Four: Monitoring and Evaluation</b>	
Activity A: Reporting of Progress against the Performance Monitoring Plan	
<ul style="list-style-type: none"> <li>▪ Status of M&amp;E in each POUZN country and progress against the PMP for each current program reviewed and reported</li> </ul>	<ul style="list-style-type: none"> <li>▪ PMP revised, toolkits for evaluation of POU and zinc programs finalized and disseminated to field teams. Research management plans developed and review of required research in each POUZN country completed.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Analyses of data to be used for programmatic decision making completed and information communicated to the field</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data sets collected from PSI; currently reviewing data to determine next steps in data analysis</li> </ul>
<ul style="list-style-type: none"> <li>▪ Results to date documented and disseminated</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided herein and to USAID in results pathways reports</li> </ul>
<ul style="list-style-type: none"> <li>▪ Further refine the POUZN PMP</li> </ul>	<ul style="list-style-type: none"> <li>▪ Revised PMP submitted to USAID on August 8. Pending approval.</li> </ul>
<ul style="list-style-type: none"> <li>▪ Recommend any adjustments or additional research needs that will be required to effectively evaluate program impact</li> </ul>	<ul style="list-style-type: none"> <li>▪ Developed research plan to effectively evaluate program impact</li> </ul>

## **TASK ONE: WORKPLAN/BUSINESS PLAN DEVELOPMENT**

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### **Objectives:**

- Finalize and receive approval for the Year Three workplan
- Complete and submit the Year Three Semi-Annual Report
- Complete and submit an Annual Report for Year Two activities
- Submit a workplan for Year Four
- Complete work and business plans for up to two POU countries
- Complete work and business plans for one Zinc country

### **Status Report on Key Activities and Outputs:**

#### ***Activity A: Workplan Development and Reporting***

##### ***Year Three Workplan***

The Year Three Workplan was submitted to the CTO on October 31, 2007 and approval was received in November 2007. Work under this plan is the subject of this Annual Report.

##### ***Semi-Annual and Annual Reports***

The Year Two Annual Report, covering the period October 2006-September 2007, was completed and submitted to the CTO on November 15, 2007. A Semi-Annual Report, covering the period October 2007-March 2008, was completed and submitted to the CTO on May 15, 2008.

##### ***Submit a Year Four Workplan***

The POUZN team developed and submitted a draft workplan for Year Four activities on October 11, 2008. Subsequent discussions were held with USAID/W and a final workplan was submitted November 12, 2008.

#### ***Activity B: Complete a second year workplan for POU activities in Rwanda and a workplan for targeting PLWHA in Rwanda***

During the period November 11-17, 2007, POUZN's Technical Advisor for Safe Water, Megan Wilson, traveled to Kigali, Rwanda where she developed a second year workplan for continuing activities to re-introduce the household water disinfection product, *Sâr'Eau*, as well as a workplan for introducing a household water disinfection program to people living with HIV/AIDS in that country. As a result of this visit the work/business plan for these-related POU activities in Rwanda was completed and submitted to USAID/W in December 11, 2007. The workplans were approved by the USAID Mission to Rwanda on January 17, 2008.

***Activity C: Complete work/business plans for one new POU country (if funding available)***

It was agreed with USAID that POUZN would focus, at this time, on implementation of existing programs, rather than investing resources in new countries.

***Activity D: Complete a work/business plan for one additional zinc country***

During the period December 8-19, 2007, POUZN's Zinc Technical Advisor, Vicki MacDonald, traveled to Antananarivo, Madagascar to conduct an assessment of the potential for introducing a zinc product through private sector channels in that country. As a result of this visit a work/business plan for introducing a diarrhea treatment kit containing a blister pack of ten 20 mg tablets of zinc and two sachets of a new flavored low-osmolarity Oral Rehydration Solution (ORS) into the Malagasy market was completed. This workplan was submitted to USAID in December and approved by the USAID Mission in December and by USAID/W on February 7, 2008.

## TASK TWO: FIELD IMPLEMENTATION

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### Objectives:

The field implementation objectives for Year Three were as follows:

- Continue to support the introduction of the SWS (Certeza) program in Angola
- Support the expansion of the existing PUR program in DR Congo
- Support the expansion of the SWS (Dlo Lavi) program in Haiti
- Continue to support the scale-up of the existing SWS (WaterGuard) and PUR programs in Kenya
- Continue to support the scale-up of the existing SWS (WaterGuard) and PUR programs in Malawi
- Continue to support the scale-up of existing SWS (Sûr'Eau) program in Rwanda
- Expand access to SWS in Rwanda through Mutuelles de Santé
- Introduce an SWS program targeting PLWHA in Rwanda
- Support the introduction of a household water treatment product and diarrhea treatment kit containing zinc and ORS in Benin
- Take to national scale a program to provide zinc as a treatment for diarrhea in Nepal
- Scale up a POU water treatment program in one additional country (if funds are available)
- Introduce a second POU water treatment product in DR Congo (if funds are available)
- Scale-up or launch a zinc treatment program in one additional country
- Provide technical assistance to support the introduction and/or maintenance of zinc and/or POU programs

### Status Report on Key Activities and Outputs:

#### A. *Continue to support the introduction of the SWS (Certeza) program in Angola*

Background: Over the past 18 months, POUZN has co-funded, with Exxon and UNICEF, start-up activities for a POU product, *Certeza*, in Angola. On February 21, 2008, PSI/Angola received final approval from the Ministry of Health and other government authorities for the launch of the *Certeza* program. This allowed the program to move out of the preparatory phase and into the implementation of the social marketing program, beginning in Luanda, the capital.

Activities During Year Three: During the first half of the year, a number of preparatory steps were taken: development of messages for marketing materials (posters, stickers, information pamphlets, and radio programming); facilitation of focus groups to test product labeling, slogans and instructional materials; training of the project coordinator and community agents who are now implementing IPC activities; development of the program for local theater events; and on-going coordination with the Ministries of Health and Energy & Water.

Beginning the first of March, the sales team concentrated on introducing *Certeza* among outlets in pharmacies and retail outlets that already carry other PSI products; promotional materials were supplied to these outlets; and theater events began and were met with enthusiasm by the local

population PSI sales teams organized two weeks of community launch events at local markets in the target municipalities to raise recognition of the new product, distribute pamphlets with messages on safe water and sell directly to end consumers. In April, an official launch event, attended by MOH, donors and other stakeholders took place, new retail sales outlets were opened and the radio campaign began airing. Radio and billboard communications on household water treatment and hygiene promotion were placed in June and have supported the strong uptake of *Certeza*.



IPC activities involving product demonstrations and promotion have been implemented in two large target municipalities around Luanda as well as directly to women's groups organized through faith-based organizations. Community behavior change agents have carried out activities to educate target audiences about water treatment and good hygiene, demonstrations on product use, as well as dynamic theatre events highlighting the importance of treating water at the point of use to avoid diarrheal disease - especially for children

under the age of five. Promotional events targeting women in markets continue to take place on a weekly basis, where information/sales tables are set up and community theatre is presented.

#### Results:

- Total sales of product (March -September): 86,448 bottles which treated 86,448,000 liters of water.
- 293 outlets now carry the product.
- Three radio spots were launched on Radio Luanda and Radio Scola with a total of 56 spots per week (728 in total over 3.5 months).
- Eight billboards were set up in different locations of Luanda.
- Community agents held approximately 206 educational and promotional activities in the following places: markets (61), churches (41), health centers (48), retailers and pharmacies (54), and hospitals (2). Of these 206 events, 78 included educational theatre pieces in which PSI's theatre group 'Luz da Vida' accompanied PSI staff, performing a theatrical skit illustrating the importance of point-of-use water treatment. Approximately 29,309 people were reached via these activities.

#### ***B. Support the expansion of the existing PUR program in DR Congo***

Background: The POUZN-support program in DR Congo focuses on deepening the reach of PUR in the South Kivu region. Since September 2007 the POUZN team has been working closely with USAID/DRC's bilateral AXxes project and its stakeholders (InterChurch Medical Assistance, Catholic Service Relief, World Vision and MoH) to implement the program.

Activities during Year Three: During this past year the POUZN field team expanded distribution of PUR in the South Kivu region through both commercial distribution and community-based channels in rural areas. Distribution of PUR was complemented by IPC activities in health centers and markets and through household visits, conducted by partner NGOs from the AXxes

Project. Branded and generic safe water spots were aired via community radio and television channels in endemic cholera areas. The PSI research team conducted the baseline quantitative household-based survey in the health zone of Uvira in the South Kivu province to examine the current use of PUR at the household level and assess behaviors associated with the practice of treating drinking water and hygiene. In collaboration with Interchurch Medical Assistance, Catholic Relief Services and the Ministry of Health, the team integrated information on the importance of safe water and POU water treatment into Project AXxes training, which was delivered during training sessions held in December. As a follow on, these trainees received 600 demonstration kits to continue to provide PUR demonstrations at their respective health centers during patient (especially antenatal and pre-school) consultations. Supervisory visits reinforced key messages and continued the promotion of POU to health zone staff. A new radio spot, a teledrama in Swahili, and other promotional/IEC materials were produced. Household visits were conducted by PSI mobile educators. During project review meetings with the Ministry of Health and AXxes project partners recommended incorporating POU water treatment and hygiene behavior change activities into the programs of all health zones in Sud Kivu.



#### Results:

- During the past 9 months 205,815 sachets PUR were sold, treating over 2.4 million liters of water; 114 new points of sale in both urban and rural areas were created throughout AXxes project health zones.
- An additional 10,840 sachets were used in community-based demonstrations and provided without charge to cholera outbreak areas in Minova.
- 280 radio talk shows were aired on community stations about safe water and hygiene behavior change.
- Branded and generic safe water radio spots were aired over 13,800 times on six radio channels in cholera-prone areas, reaching 1.6 million individuals.
- POUZN team members participated in 2,337 child health-related educational events reaching 109,800 individuals, the majority of which were mothers of children under five years of age.

#### ***C. Support the expansion of the SWS (Dlo Lavi) program in Haiti***

Background: A joint POUZN/Private Sector Partnerships One (PSP-One) work plan was submitted and accepted for implementation by the USAID Mission in June 2007. Beginning in October 2007, POUZN assumed responsibility for continuing implementation. Given there is no local water treatment product manufacturing capacity in Haiti, the POUZN team made arrangements to procure supplies from the Dominican Republic. These supplies were produced, purchased and shipped overland to Haiti but when tested were found to be of inconsistent quality. In response, PSI sought other sources from which to procure product, locating a U.S. firm, Prime, in Miami, and subsequently placing an order with them in December 2007. The first shipment of 63,300 bottles arrived in Haiti in March 2008. Product samples were sent to the Ministry of Health (MOH) and to the designated national laboratory for testing. Approval was

received in May authorizing the distribution of Dlo Lavi nationwide. A second shipment of 143,150 bottles was received in June. Additional supplies were reordered in August due to high demand associated with hurricane relief.

The *Dlo Lavi* program has a two-pronged distribution strategy: 1) Commercial sector distribution through shops, pharmacies, kiosks, etc. nationally and 2) community-based distribution through local and international NGOs including certain SDSH Pwoje Djam sites. SDSH Pwoje Djam sites are in rural and urban areas and cover approximately 34 of Haiti's 136 communes. These sites consist of clinics and programs for young children and their mothers, hence serving the target population. The commercial distribution of *Dlo Lavi* is intended to be nationwide, but has been focused during this initial year in Port au Prince and certain SDSH Pwoje Djam sites.

Activities during Year Three: Initial activities to expand commercial distribution and community-based distribution through USAID partner NGOs of the chlorine-based water treatment product, *Dlo Lavi*, were implemented. In preparation for community distribution, the research staff conducted focus group discussions to pretest IEC and branded print materials and a media plan was prepared and Mithras Communication selected to broadcast the radio spots. Educational materials were developed and produced including safe water brochures. Incentives (T-shirts and 1 liter water containers) were produced. A *Dlo Lavi* Radio Spot and TV documentary were produced and disseminated.

Results:

- 44,608 bottles of *Dlo Lavi* sold; 17,724 bottles distributed for hurricane relief.
- 63,996,000 liters of drinking water treated with the Dlo Lavi and PUR
- 518 trainers from NGO partners trained.

***D. Continue to support the scale-up of the existing SWS (WaterGuard) and PuR programs in Kenya***

Background: Since March 2007, POUZN has supported the scale up of the SWS program in Kenya with a focus on increasing accessibility to and demand for POU products in poor, rural regions of Coast province that has the second highest diarrheal prevalence and is among the fastest growing provinces of Kenya. POUZN is coordinating its activities with PSI's other POU activities being implemented under the Mission's bilateral social marketing contract with PSI.

Activities during Year Three: The POUZN program in Kenya has continued to scale-up WaterGuard promotion and distribution in the Coast province through training of personnel from partner organizations and increased partnership and involvement with district and province-level planning forums. PSI Kenya has identified barriers in the Coast province through feedback from monitoring and supervision of CBO outreach partners and has identified a new behavior change concept, *Education Through Listening*, to enhance community mobilization skills. The program has strengthened relationships at the national, Coast provincial and district level health authorities. Within Coast Province, the program is active in MOH led activities such as this year's health initiative, 'Malezi bora'.

The POUZN program in Kenya is continuing to scale-up the WaterGuard promotion and distribution in the Coast region with the training of personnel from partner organizations: MOH, Aga Khan Coast Rural Support Program, Plan International and the Mombasa Relief Initiative. The most recent MAP survey (2008) indicated that WaterGuard was available in 45% of rural outlets and PUR was available in 30% of rural outlets in the Coast region.

With POUZN funds a national retail audit on water treatment products was purchased in order to inform the Kenya team of the relative positioning of WaterGuard and PUR by market share, outlet location and region. This data showed that PSI's water treatment products are the leading products with about 75% share of the urban market and 99% share of the rural market in Kenya.<sup>1</sup> In urban markets several commercially available products are present, including Aquatabs and a locally-produced chlorine liquid product similar to WaterGuard at a comparable price.

PUR program activities continued to focus on promotion through schools in the Eastern Region, brand promotion on radio and television as well as IPC, and an urban campaign entitled "Send a Miracle Back Home" which encourages urban Kenyans to purchase PUR and give it to their rural relatives during holiday travel.

The POUZN program has developed a mass media campaign to address findings of a recent household survey that indicated a decrease in risk perception with regard to water and related illnesses. Households using water treatment products also showed a decline. The new campaign addresses the belief that clear water is safe to drink which is a key barrier to POU water treatment use both nationally and more so in the Coast region. This generic messaging is complemented by branded communication. Promotional programs on local Coast radio stations were aired, including a new radio and television campaign encouraging consumers to "Guard Every Drop." A print ad was published in a high circulation monthly magazine; and posters and IEC materials were distributed to partners in rural areas.

#### Results:

- 198,968 bottles of WaterGuard and 30,720 sachets of PUR were sold in the Coast region resulting in 191,275,000 liters of water treated
- 160 new community-based partners were identified
- 60 POUZN-trained community drama groups are actively carrying out IPC activities each month.
- A WaterGuard infomercial was disseminated via mobile cinema and seven Health Action Days were held.
- 275 local IPC activities were held reaching approximately 38,000 individuals.
- 225 personnel from partner organizations were trained

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<sup>1</sup> Based on retail audit data for the period September through December 2007.

### ***E. Continue to support the scale-up of the existing SWS (WaterGuard) and PuR programs in Malawi***

Background: In 2006, PSI/Malawi received funding through USAID's Child Survival and Health Grants Program (CSHGP), POUZN and P&G to support its safe water program. Through the integration of these various sources of support, PSI/Malawi is continuing to scale-up the safe water program to increase reach in rural areas through community-based and NGO partners and enhance communications and IPC activities related to diarrheal disease prevention.

Activities during Year Three: The Malawi program continues to move forward with training and supervisory activities in targeted rural areas, training NGO field officers and outreach personnel as safe water promoters and successfully monitoring program activities in all partner impact areas. PSI has been working with four IDP partners (World Vision, World Relief, Blantyre Synod, and Fresh Water Project) in Mzimba, Dowa and Blantyre districts and during the past year signed an agreement with Work for Rural Health in Salima district. Within these targeted districts, MOH Health Surveillance Assistants (HSAs) are working hand in hand with the promoters and supervisors, building a strong collaboration at the community level. Through project supervision visits and an annual partners' workshop, PSI identified successes and initial challenges from the first full year of implementation with the community-based promoter approach. Continuing challenges include balancing the interface between retailers and community-based IDP promoters and inaccessibility of roads during the rainy season.

Preliminary findings from the CDC-led evaluation of UNICEF's Hygiene Promotion Project (WaterGuard was included in the kit that was provided free of charge to pregnant women at 15 participating MOH health centers to encourage return ANC visits) indicated an increase in current POU use from 20% to 60% and an increase in observed use (chlorine residual tested + bottle in home) from 2% to 61%. The evaluation also demonstrated increased awareness of WaterGuard, increased accessibility of the products, acceptance of community-based distribution systems, general reduction in diarrheal diseases in the impact area and strengthened collaboration between partners and district environmental staff.

To support the launch of the new bottle and price increase to MK 30 (USD 0.21), PSI produced a new WaterGuard logo and bottle label that features an attractive, traditional family that appeals to both urban and rural audiences along with illustrated instructions demonstrating new dosing protocols. PSI/Malawi also produced and distributed new WaterGuard posters and instructional leaflets and sponsored the Zokonda Amayi Program on one of the Malawi's most popular radio stations. Product demonstrations in urban and semi-urban communities were also intensified to promote awareness of the new WaterGuard as well as the new instructions. PSI has also identified an alternative bottle supplier in the event of recent challenges with their current transition to prevent future stock-outs of WaterGuard. A new WaterGuard Wa Ufa poster and instructional leaflet were developed and disseminated. New video and television and radio spots for both products are in production

In response to a cholera outbreak in Blantyre City, the project team sponsored a favorite women's radio program which had an interactive discussion on cholera and diarrhea prevention and management. The team intensified product demonstrations and the distribution of IEC and

promotional materials in districts that experienced cholera outbreaks and ensured that surrounding retail outlets stocked water treatment products.

During the fourth quarter of Year 3, PSI conducted a national household survey to obtain monitoring data which will be used to analyze progress of the program against the Performance Monitoring Plan.

Results:

- 693,227 bottles of WaterGuard and 233,872 sachets of PUR were sold for the combined POUZN and Child Survival Grant program during FY08 representing 505,000,000 liters of drinking water treated
- 492 outlets now carry WaterGuard and 196 outlets now carry PUR.
- 103 NGO field officers and outreach personnel were trained and are successfully monitoring program activities in all partner impact areas.

***F. Continue to support the scale-up of existing SWS (Sûr'Eau) program in Rwanda***

Background: In March 2007, PSI/Rwanda relaunched PSI/ Rwanda's household water treatment product, *Sûr'Eau*, and has focused on scaling up its use by children under five and people living with HIV/AIDS. The program established and continues to strengthen partnerships with local leaders, businesses, community-based and faith-based organizations, to further build social support for *Sûr'Eau*

Activities in Year Three: *Sûr'Eau* was officially relaunched in Rwanda and the POUZN team continued to work with an array of public, private and NGO sector entities and partners to promote and distribute its new smaller bottle with more concentrated product and new label. The team established and strengthened partnerships with local leaders, businesses and community- and faith-based organizations, and created several new sales points in both urban and rural settings to build social support for the product. In addition to



working with MOH clinics and their associated outreach workers, the team developed a new distribution system to reach a greater number of commercial sector outlets and signed contracts with both Belgian and German technical assistance programs to sell *Sûr'Eau* at health centers which they support. The team has received MOH approval to train community outreach agents as community-based distributors to further expand national reach of the program. The POUZN field team produced and disseminated new communication materials, including a radio spot which repositioned the *Sûr'Eau* brand as an improved product that would treat a greater quantity of water that enables people to “live a good life.” Other promotional materials, including mobile video unit spots, over 90 billboards, flyers, banners, etc. were produced and disseminated. The POUZN team also produced interpersonal communication materials and trained private sector sales agents and community health agents. Key water disinfection and hygiene messages have now been incorporated into the community health worker training curriculum developed by the MOH. Technical assistance was provided by CDC to analyze the *Sûr'Eau* production processes

and assist the project to overcome supply issues with the local production firm. The team has also identified backup suppliers in both Uganda and Kenya. In October-November 2007, the team conducted a nationwide household survey on diarrheal disease prevention and water treatment practices which will serve as the baseline for this program.

### ***Expand access to SWS in Rwanda through Mutuelles de Santé***

With the financial support of USAID's Health Systems 20/20 Project, the distribution of *Sûr'Eau* through mutuelles was initiated. Stakeholder orientation meetings were held in each of the target districts in December and in January TOT trainers were trained. *Sûr'Eau* sales through the mutuelles program were launched in Nyagatare in February. Program/product launch in Gisenyi (Rubavu district) took place at the end of April. Baseline data collection was completed in December 2007 and analyzed in February in the two target districts and one control district. Baseline results were shared with HS20/20, Abt and PSI/Rwanda program staff and USAID/W.

### ***Introduce an SWS program targeting PLWHA in Rwanda***

Background: As part of the Government of Rwanda's National HIV/AIDS Plan 2005-2009 and US President's Emergency Plan for AIDS Relief (PEPFAR), USAID determined that support for the provision of POU to PLWHA, in addition to prevention and treatment activities, was an essential element of the provision of care to people living with AIDS. In 2008, the USAID Mission to Rwanda obligated funds to POUZN to implement a program that focuses on training public sector, VCT and palliative care personnel to provide correct information about SWS, strengthening partner associations, and increasing knowledge about SWS through various communication media.

Activities during Year Three: The PSI team initiated activities by developing an integrated HIV/Safe Water training module of 4 major parts: hygiene and diarrheal diseases, household water treatment and *Sûr'Eau*, Voluntary Counseling and Testing (VCT) techniques, and training techniques. In close collaboration with district authorities, the PSI team conducted workshops with the aim of 1) integrating health facilities (including VCT) into the public sector distribution system, 2) integrating safe water messages into existing government AIDS communication materials. The beneficiaries of those workshops were representatives of health facilities including people in charge of VCT services. In total, 249 health facilities staff attended the workshops. Each health center and district was provided with communication materials (flipcharts) to enable better communication with the target audience.

#### Results for all programs in Rwanda:

- 224,214 bottles of SurEau, sold from 1241 sales points, resulting in 224,200,000 liters of water treated.
- 113 IPC events reached over 46,000 persons.
- 984 individuals trained including school personnel, rural health and sanitation agents.
- Mass media campaign to promote water treatment aired on 4 stations with nationwide reach.

- 140 trainers from mutuelles, health center management and health animateur coordinators were trained in two TOT sessions.
- 2900 animateurs were trained in the two intervention districts of Nyagatare and Rubavu.
- *Sûr'Eau* sales through the mutuelles program were launched with over 35,500 bottles of *Sûr'Eau* provided to mutuelle members.
- Household (TRaC) survey executed and analyzed. This survey found that 26% urban women age 15-46% had ever used *Sur'Eau* but only 6% of that group had used it in the last month. In rural areas only 11% of respondents had ever used the product with only 4% using in the previous month.

***G. Support the introduction of a household water treatment product and diarrhea treatment kit containing zinc in Benin***

Background: In September 2007, USAID/Benin approved the POUZN workplan to implement an integrated diarrhea prevention and treatment program promoting Aquatabs for the disinfection of household drinking water and a diarrhea treatment kit containing both pediatric zinc and ORS for the treatment of diarrhea. This workplan outlined a program which links it closely with other key USAID bilateral health programs, such as the Integrated Support for HIV/AIDS Prevention and Family Health (IMPACT) project, the *Projet Intégré de Santé Familiale* (PISAF), and UNICEF's pilot zinc program.

Activities during Year Three: This program got off to a slow start as a result of the loss of two expatriate candidates to serve as PSI Program Advisor for this integrated effort. Marketing strategies for both programs were completed in March 2008 with POUZN HQ technical assistance and the Program Advisor arrived in Benin in April. Significant progress has been realized in the past five months. The team in Benin has successfully registered both products; finalized training materials for both facility-based health workers and community mobilization agents; finalized marketing strategies for both products; ordered and received Aquatabs, zinc and ORS products; and designed and produced packaging and promotional materials. With UNICEF funding, PSI launched the new OraselZinc diarrhea treatment kit at the end of March in the Zou and Collines departments. OraselZinc is now available in all public sector health centers in these departments at a subsidized price.



In June an unsubsidized OraselZinc kit was launched and is being distributed through the national pharmaceutical distribution network. In August, the kit was launched into the commercial (fast moving commercial goods) distribution network. Thus far, the project has distributed 200,616 kits, including a large sale of 162,000 kits to CAME, the government's pharmaceutical wholesaler. IPC materials on hygiene and diarrhea prevention were developed along with two diarrhea treatment radio spots (one branded and one generic) which are now being aired.

The first order of Aquatabs arrived in Benin in August and packaging of the product was completed in time for the September launch. Two safe water radio spots (one branded and one generic) were developed and began airing in September. Aquatabs IPC and promotional materials, including flyers, posters and brochures, were developed and pre-tested to ensure cultural acceptability, and printed in advance of the launch.



The training curriculum for both facility-based health workers and outreach agents was finalized in March with subsequent training of trainers completed in April and partner training completed in July and August. Grant agreements with NGO partners were signed to include the dissemination both diarrhea prevention and treatment messages and educational activities. In August and September, PSI's 13 NGO partners under project IMPACT focused their community-based educational activities exclusively on the promotion of OraselZinc and other key diarrhea prevention and treatment behaviours including safe water and handwashing.

The PSI team was able, with Aquatabs in hand, to respond quickly to a cholera outbreak in August 2008 with its supplies of Aquatabs and OraselZinc, strengthening exposure to the products and engendering good will with the Ministry of Health in the country. PSI and its partners worked with the Ministry of Health to focus community outreach activities in areas particularly affected by the cholera outbreak.

#### Results:

- 200,616 diarrhea treatment kits were sold through commercial distribution channels, of which 162,000 were sold to the public sector pharmaceutical wholesaler, CAME. An additional 4,014 kits were provided for promotional purposes.
- 1200 blisters of Aquatabs were sold (12,000 tablets). 2,645 blisters were also provided for promotional purposes. 300,000 liters of drinking water treated in September alone.
- 4990 branded radio spots and 3306 generic radio spots were aired during the fourth quarter alone.
- Over 8000 educational sessions were held involving more than 28,400 individuals.
- 14 master trainers, 299 health workers, 41 members of PSI partner NGOs and 20 members of PSI's partner radio stations in the project's targeted departments were trained.
- PSI's detailers visited 207 health centers and 131 pharmacies to provide training and education on Orasel/Zinc.
- POUZN donated a total of 150 boxes of Aquatabs and 560 Orasel/Zinc kits to the Government of Benin during a cholera outbreak in August.

## ***H. Take to national scale a program to provide zinc as a treatment for diarrhea in Nepal***

Background: POUZN's Phase I efforts, focusing on training both public sector health workers and private sector pharmacists in the Kathmandu valley and introducing zinc treatment in the three valley districts, took place during 2007. The Phase II workplan was submitted in September 2007 and approved for implementation in April 2008. Although there were delays between development of both workplans and Ministry approvals, the Ministry of Health's Child Health Division provided leadership and support for both public and private sectors programs throughout. Phase II of the POUZN zinc program in Nepal focused on a national launch of locally manufactured zinc products, extending the program into 27 additional CB-IMCI districts covering approximately 67% of the population. The POUZN program in Nepal operates on the "Manufacturer's Model" of social marketing: supporting the local manufacture of quality dispersible zinc tablets through technical assistance in quality assurance, the promotion of zinc via a generic mass media campaign, training private sector pharmacists or pharmacy assistants, and implementation of other promotional and educational efforts. Given previous MOH emphasis on use of ORS and local ORT options, zinc and ORS/ORT were promoted together but not co-packaged.



Activities during Year Three: With POUZN encouragement and technical assistance, three local Nepalese pharmaceutical manufacturers introduced five pediatric zinc products into the pharmaceutical market in 2007. These products were tested and quality approved by the U.S. Pharmacopeia (USP) who also conducted a Good Management Practices (GMP) assessment of the manufacturing process for zinc sulfate tablets at Deurali-Janta Pharmaceuticals (DJPL), Nepal Pharmaceutical Limited (NPL), and CTL Pharmaceuticals (CTL) in Kathmandu and Birgunj, Nepal in January 2008. The team subsequently provided technical assistance to management personnel at each of the facilities on how to improve their production processes to meet international GMP standards and become eligible to supply international tenders for pediatric zinc products. In order to support the marketing efforts of these firms, POUZN provided a range of support and incentives. These included financing sponsored advertisements in each of the company's trade journals, providing funds to encourage extra marketing efforts, and co-sponsoring Continuing Medical Education (CME) programs that focused on introducing the zinc protocols to doctors and other medical professionals. All three firms actively participated in the national launch and training sessions for pharmacy personnel.

During Phase II, 4,147 private sector chemists/pharmacists from the 27 additional CB-IMCI districts were trained. Four organizations were selected to conduct the training: International Network for Rational Drug Use, Nepal (INRUD), Sustainable Development Institute Network, Nepal (SUDIN), Youth for World, Nepal (YWN), and Makulu Health Academy (MHA). PSI's Training Manager provided TOT training to Master trainers from the four selected firms who in turn trained their field training staff in the curriculum. Trainees were selected from lists provided by local druggist associations and drug regulatory authorities, the National Chemists and Druggist Association and the Department of Drug Administration (DDA). This training

was conducted primarily in May and June 2008, with the final training session completed before the end of July.

POUZN supported the marketing efforts of local firms by developing and airing four 60 second radio spots and one 30 second and one 60 second television commercial. The radio spots conveyed the major messages through discussions featuring a physician, pharmacist, mother, and health worker. POUZN contracted with two Kathmandu stations and then an additional 19 regional FM radio stations outside the valley to broadcast the four spots. POUZN printed informational inserts for consumer use, job aids, posters, and produced large flex boards—the job aid printed on flexible, longer lasting fabric-based materials for use in out patient department/clinic waiting rooms. In addition, billboards containing the Baby Zinc logo and the key message “ORS and Zinc tablets—the most effective diarrhea treatment for children under 5” were prepared and installed near the four hospitals in Kathmandu valley and affixed to the side of every district hospital in the 27 target IMCI districts.



A final population-based research study, conducted in August and September 2008 by Blitz Media, consisted of a household survey of 3550 households in all 30 of the program districts where zinc is available in the private sector. This survey sought to determine consumer knowledge about zinc and where to access the product, message recognition and retention, and correct use of the product. In addition, a mystery client survey was conducted with 100 private sector providers throughout the Kathmandu valley.

#### Results:

- 160,000 treatments sold to retail establishments throughout the country.
- Excellent partnership developed between public and private sector stakeholders including the Nepal Government, private sector opinion leaders and corporations, trade associations, UN agencies and the medical community.
- 35,000 radio spots aired with an average of 16 spots/day per station on 23 radio stations.
- 4,147 private sector chemists trained during Phase II. ( 5800 private sector and 2243 public sector personnel trained in both phases).
- Job aids and informational materials developed and printed and provided to over 8000 health care providers and pharmacists trained in 30 districts.
- U.S. Pharmacopeia certifies high quality of Nepalese zinc products, increasing confidence of the Ministry of Health and influencing their plans to procure from their own private sector next year.
- Three Nepalese Zinc manufacturers aggressively marketing zinc at an affordable price in over 30 districts. All three firms included in the list of ‘Zinc Manufacturers in the World’
- Zinc press ads published in three national daily newspapers and four magazines reaching approximately 6000 members of pharmaceutical and medical associations.

- Household survey to determine availability, knowledge and usage of Zinc tablets conducted at 3500 households.
- Mystery Client Survey to determine prescribing practices conducted among 100 pharmacists in the Kathmandu valley
- CME meetings organized by manufacturers at the Kanti Teaching Hospital in Kathmandu and Biratnagar in September 2008 for over 215 pediatricians, chemists, paramedicals, outreach workers and other medical assistants.
- Two manufacturers organize “diarrhea campaigns” to supplement the training in the Bara, Kathmandu, Pokhara, Dumre and Besi Sahar.

***I. Scale up a POU water treatment program in one additional country***

It was agreed with USAID that priority would be given to implementation of existing programs rather than investing resources in new country efforts.

***J. Introduce a second POU water treatment product in DR Congo***

There are currently no plans to launch a second water treatment product in DR Congo as Mission funding was not forthcoming during this fiscal year. However, POUZN may consider in the future leveraging the UNICEF program that is enabling the launch of chlorine tablets in areas with tendency towards cholera epidemics. Support of this program would enable broader country coverage of product sales of chlorine tablets and associated communications.

***K. Scale-up or launch a zinc treatment program in one additional country***

Background: Madagascar’s Ministry of Health and the USAID Mission to Madagascar have been strong supporters of improving diarrhea case management at the community level through appropriate treatment with zinc and ORS/ORT. In 2007, following a late 2005 country assessment by a USAID-funded team, both the BASICS project and UNICEF began implementing programs to upgrade the skills of facility- and community-based health workers in diarrhea case management, including zinc/ORS as part of that training. POUZN was invited to Madagascar in December 2007 to develop a plan for implementing an accompanying private sector program. The POUZN initiative focuses on expanding knowledge, access and correct use through a two-pronged program to market a diarrhea treatment kit containing zinc and two sachets of a flavored ORS: a full cost recovery program through Madagascar’s network of 300 pharmacies and 3000 depot de medicament (drug counters) nation-wide and a subsidized program through community-based sales in partnership with two international NGOs in a select number of pilot districts. Both programs will be supported with accompanying training and mass media and interpersonal communication. PSI’s Social Marketing Cooperative Agreement with USAID/Madagascar also includes provision for zinc/ORS social marketing and will supplement the POUZN project by providing funding for improving access to the subsidized DTK in additional districts.

Accomplishments during Year Three: The Madagascar business plan was completed and approved by USAID in January 2008, whereupon the field team began preparations for a launch by early FY09. To date, the POUZN team has registered the trademarks; pretested and revised

printed and pictorial use instructions; taste tested and selected an appropriate ORS product; ordered the products for the diarrhea treatment kit; arranged for printing the packaging the diarrhea treatment; negotiated agreements with NGO partners for the community-focused portion of the program; fielded focus groups to refine and improve diarrhea-related questions in preparation for the planned household baseline survey, coordinating research closely with the DHS field team which is also conducting a major national HH health survey; and developed integrated IMCI community health worker training curriculum in collaboration with MOH, UNICEF and BASICS program leaders. Given delays in receipt of packaging and ORS products from India until December, the program launch is now planned for early January 2009.



***L. Provide technical assistance to support the introduction and/or maintenance of zinc and/or POU programs***

In March, Vicki MacDonald, POUZN's Zinc Technical Advisor, provided technical assistance to the PSI team in Benin, assisting with the finalization of the training materials for both clinic-based health workers and outreach personnel and the marketing strategies for the diarrhea treatment kit, ORASEL/Zinc. Ms. MacDonald also worked with the field team providing inputs to the Aquatabs marketing plan, developing contracting documents for use with nongovernmental organization partners, and revising the implementation schedule.

In June, CDC Safe Water Expert, Daniele Lantagne, provided technical assistance to the POUZN program in Rwanda focused on analyzing the Sûr'Eau production processes and assisting the project to overcome supply issues with the local production firm

## **TASK THREE: TECHNICAL/GLOBAL LEADERSHIP**

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### **Objectives:**

- Publish a case study on lessons learned through the implementation of POU programs
- Prepare and disseminate lessons learned in the implementation of zinc programs
- Develop country briefs on at least three POUZN country programs
- Attend key conferences (GHC, Household Water Network Meeting etc.)
- Present at least one paper on POU and/or zinc
- Attend POU and Zinc partner meetings
- Continue dissemination of information on POUZN activities through electronic media

### **Status Report on Key Activities and Outputs:**

#### ***A. Publish a case study on lessons learned through the implementation of POU programs***

Various topics have been discussed by the POUZN team, primarily focusing on strategies for reaching the rural poor. The approaches and countries that were discussed include: Rwanda – utilizing the public sector and community-based health insurance schemes; Madagascar – community-based distribution; Kenya, Benin and Rwanda – partnering with NGOs. Given the state of implementation in many countries and the fact that there is no mid-term evaluation data and that the Aquatabs program only recently commenced in Benin, it was recommended that this activity be delayed until Year 4.

#### ***B. Prepare and disseminate lessons learned in the implementation of zinc programs***

POUZN is in the process of analyzing the data from the Nepal program household survey and will conduct an operations research study of the Madagascar program in February/March of 2009. This information, alongside monitoring data from Benin, will provide a better base for summarizing lessons learned. Therefore preparation of this paper has been delayed until Spring 2009.

#### ***C. Develop country briefs on at least three POUZN country programs***

Country briefs highlighting progress to date in socially marketing POU products in Malawi, Rwanda and zinc in Nepal are in draft and will be finalized in the fall of 2008.

#### ***D. Attend key conferences (GHC, Household Water Network Meeting etc.)***

POUZN headquarters team participated in the Global Health Council Conference held at the end of May in Washington, D.C. Both POUZN headquarters and field staff participated in the Household Water Network Meeting held in June in Ghana.

### ***E. Present at least one paper on POU and/or zinc***

This year POUZN staff submitted three papers to the Global Health Council for presentation at the GHC conference. One of these papers, entitled: “*Scaling-up pediatric zinc with ORS for diarrhea treatment,*” was selected for by the GHC organizers and was presented on behalf of the project by Dr. Y. V. Pradhan, Director of Child Health, Nepal Ministry of Health.

In addition, several POUZN HQ and field team members participated in the Household Water Network Meeting in Ghana and presented the following papers: *Leveraging the Private and Public Sectors to reach the Poorest of the Poor with Point-of-Use Water Treatment in Rwanda,* and *Best Practices in Social Marketing Safe Water Solution for Household Water Treatment: Lessons Learned from Population Services International Field Programs.*

### ***F. Attend POU and Zinc partner meetings***

POUZN staff have actively participated in all POU partner meetings and are now regularly included in the regular teleconferences of the Zinc Task Force.

### ***G. Continue dissemination of information on POUZN activities through electronic media***

POUZN staff members continue to work with PSP-One to ensure that the PSP-One on-line resource library is searchable by topics of interest to the POUZN community and continue to add documents of interest on POU and zinc to the resource library. This year the POUZN team posted the 2007 study, *Bringing safe water to remote populations: An evaluation of portable POU interventions in rural Madagascar* (172 downloads), the 2007 published study on the *Impact of Zinc Supplementation on Subsequent Morbidity and Growth in Bangladeshi Children with Persistent Diarrhoea* (238 downloads), and its own *Distribution of POU Water Treatment Through Mutual Health Organizations in Rwanda: Baseline Survey Results*. POUZN’s own *Best Practices in Social Marketing Safe Water Solution for Household Water Treatment* continues to be very popular with 3137 downloads since it was posted in March 2007. Approximately 600 of these downloads occurred in the past six months alone.

The most popular of the current documents/weblinks in the PSP-One resource library tend to be the practical tools for implementation of household water treatment options:

- PSI Safer Water Treatment Products and Services – 1496 downloads,
- International Network to Promote Household Water Treatment and Safe Storage –1459 downloads,
- CDC website on Safe Water – 1446 downloads,
- Household-based Water Treatment and Safe Storage Network Bulletin – 1142 downloads,
- Household Water Treatment and Safe Storage Following Emergencies and Disasters – 1132 downloads,
- Safe Water Systems for the Developing World: A Handbook for the Implementation of Household-based Water Treatment and Safe Storage Project – 1131 downloads,
- Bibliography on POU water disinfection – 876 downloads,
- Proctor and Gamble Water Purification System – 668 downloads, and

- Managing water in the home: accelerated health gains from improved water safety (2007) – 596 downloads.

The most popular resources that focus on zinc have been:

- Enhanced Diarrheal Disease Control website, which features an extensive bibliography of literature on zinc – 1410 downloads,
  - The SUZY project (Scaling up zinc treatment for young children with diarrhea in Bangladesh) – 1213 downloads,
  - Presentations from the 3<sup>rd</sup> Annual Zinc Conference, hosted by the ICDDR, B – 1117 downloads,
  - Zinc Supplementation for Treatment of Diarrhea in Infants in Pakistan, India and Ethiopia (2006) – 614 downloads,
  - Social Marketing Zinc to Improve Diarrhea Treatment Practices – Findings and Lessons learned from Cambodia – 446 downloads,
  - Qualitative Research for a Zinc Treatment Program in Nepal: Findings and Recommendations (2006) – 419 downloads, and
  - Introducing Zinc in a Diarrhea Control Program: A Manual for Conducting Formative Research – 376 downloads.

## TASK FOUR: MONITORING AND EVALUATION

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### Objectives:

- Review the status of M&E in each POUZN country and review progress against the PMP for current programs; recommend any adjustments or additional research needs that will be required to effectively evaluate program impact.
- Complete analyses of data to use for programmatic decision making and communicate that information to the field;
- Further refine the POUZN PMP, including refining M&E indicators together with CDC and Emory University as appropriate, to ensure that at the end of the POUZN project an evidence base exists to prove the effectiveness and scalability of point of use water and zinc treatment interventions; and
- Document results to date.

### Status Report on Key Activities and Outputs:

#### *A. Review the status of M&E in each POUZN country and review progress against the PMP for current programs*

POUZN team members undertook a comprehensive review of each POUZN program to ensure that household surveys have been appropriately scheduled to gather both baseline and endline data and that a set of standardized questions are being used by each field office to gather data on consistent and correct use, knowledge, and access to both POU and zinc products for inclusion in the final evaluation of POUZN progress against the PMP. The result was the developed of a detailed M&E plan and schedule, which was presented and approved by USAID, as shown in Table 2, below, for collection of both baseline and program data from each of the target countries. Annex A provides a detailed results reporting plan for each POUZN country by product area. In addition, broader zinc programmatic research questions are under discussion and final decisions on the approach to answering those questions will be determined during the first quarter of Year Four.

**Table 2. POUZN M&E Research Plan**

<b>Country</b>	<b>Baseline</b>	<b>Date</b>	<b>Follow-up</b>	<b>Date</b>
Benin POU	DHS	2006	HH Survey	Nov 2009
Haiti POU	HH (TRaC) survey	Sep-07	HH Survey	Late 2009 (est)
Malawi POU	HH (TRaC) survey	2005	HH Survey midline HH Survey endline	June 2008 Nov 2009
Kenya POU	HH (TRaC) survey	2007	HH Survey -endline	Late 2009
Rwanda POU	HH (TRaC) survey	Nov 2007	HH Survey	Nov 2009 (est)

Rwanda Mutuelles	HS2020 HH survey	Dec 2007	HH survey	Dec 2008
Rwanda HIV/AIDS	HH (TRaC) survey	Nov 2007	HH Survey	Nov 2009 (est)
DR Congo - POU	HH survey (SKivu) Uvira district only	Dec 2007	HH Survey (S Kiva)	Late 2009
Benin - Zinc	HH (TRaC) survey	(ORS) 2007	HH Survey Provider survey	Nov 2009 Jan 2010
Nepal - Zinc	DHS	2006	HH Survey Provider survey	Aug 2008 Sept 2008
Madagascar -Zinc	DHS	Aug 2008	HH Survey baseline HH Survey endline Provider survey Operations research	Nov 2008 Nov 2009 Jan 2010 March 2009

***B. Complete analyses of data to use for programmatic decision making and communicate that information to the field***

Data sets for all baseline household surveys have been obtained from PSI and discussions are underway as to next steps in analyzing that data and establishing a research framework for both individual- and cross-country analyses.

***C. Further refine the POUZN PMP, including refining M&E indicators together with CDC and Emory University as appropriate, to ensure that at the end of the POUZN project an evidence base exists to prove the effectiveness and scalability of point of use water and zinc treatment interventions***

POUZN team members have conferred with CDC, Emory, USAID, and AED to further refine the overall Performance Monitoring Plan for the POUZN program. A revised PMP was submitted to USAID on August 8, 2008.

During its review of baseline indicators for each country program, the POUZN team realized that questions designed to gather data were not uniform across countries. As a result, the team has worked closely with USAID, CDC and Emory to refine and standardize a set of questions to measure consistent and correct use of point-of-use water disinfection products and to gather information on knowledge, attitudes and access indicators. POUZN's zinc technical advisor has also worked closely with Abt staff research specialists and diarrhea treatment specialists from other projects and USAID to develop a "toolkit" for monitoring and evaluating zinc programs that includes set of standard questions that can be used to measure correct use of zinc/diarrhea treatment kit and to gather accompanying knowledge, attitudes and access indicators, as well as a set of suggested focus group discussion and in-depth interview questions that can be adapted for gathering formative research.

#### D. Document results to date

Following are two tables which outline progress in achieving interim results in each of the POUZN countries. Table 3 provides liters of drinking water treated and percentage increase from the previous year. Table 4 provides cases of diarrhea treated. Both tables include number of private sector outlets currently carrying POUZN-promoted POU and zinc products.

Country	Product	LITERS OF DRINKING WATER TREATED WITH POU PRODUCTS			OUTLETS		
		FY2007	FY2008	% change	FY2007	FY2008	% change
Angola (April-September)	Certeza	0	86,448,000	100%	0	293	100%
Benin (September)	Aquatabs	0	300,000	100%	0	131	100%
DRCongo (Oct07-Sept08)	PUR	0	2,400,000	100%	0	114	100%
Haiti (April-September)	Dlo Lavi	0	63,996,000	100%	0	68	100%
Kenya (Coast region only) (Oct07-Sept08)	WaterGuard	230,540,000	190,968,000 <sup>2</sup>	-17.2%		45% <sup>3</sup>	
	PUR	293,740	307,200	4.6%		30%	
Malawi (Oct07-Sept08)	WaterGuard	397,287,000	505,000,000	27.1%	627	492 <sup>4</sup>	-21.5%
Rwanda (Oct07-Sept08)	SurEau	22,952,000	224,200,000	876.8%	500	1241	148.2%

Country	Product	ZINC TREATMENTS SOLD			OUTLETS		
		FY2007	FY2008	% change	FY2007	FY2008	% change
Benin (April-September)	Oralsel/Zinc kits	0	200,616	100%	0	131	100%
Nepal (Oct07-Sept08)	Zinc tablets	70,000	160,000	128.6%	1660	5700	243.4%

<sup>2</sup> Disruption of program activities during tribal-related civil unrest resulted in decreased sales.

<sup>3</sup> Represents percentage of retail outlets carrying products, rather than number of outlets.

<sup>4</sup> This decrease in number of outlets is related to a re-structuring of PSI's sales and distribution system for health products. The restructuring increased the efficiency of distribution in that there are an increased number of wholesalers and distributors and a decrease in direct retail distribution by PSI Malawi. What looks to be a decrease is not a reduction in the total number of outlets stocking WaterGuard, but the result of PSI not tracking the number of outlets that distributors work with.

**Annex A**  
**POUZN Results Reporting Plans**

**Table 1 POUZN POU Results Reporting Plan**

<b>Strategic Objective:</b>	<b>Indicators</b>	<b>Countries</b>	<b>Reporting Period</b>
<b>Increased use of POU Water Treatment</b>	%HH w/children<5 treating drinking water using promoted methods (self reported)	Benin Haiti Kenya Malawi Rwanda	DHS 2006 - HH survey 2009 2007-2009 (HH surveys) 2007-2009 (HH surveys) 2005-2008 (HH surveys) 2007-2009 (HH surveys)
	% HH w/children<5 consistently treating drinking water using promoted methods (self-reported use)	Benin Haiti Kenya Malawi Rwanda	DHS 2006 - HH survey 2009 2007-2009 (HH surveys) 2007-2009 (HH surveys) 2005-2008 (HH surveys) 2007-2009 (HH surveys)
	% HH w/children<5 consistently treating drinking water using promoted methods in last 48 hours (confirmed by test)	Benin Haiti Kenya	DHS 2006 - HH survey 2009 2007-2009 (HH surveys) 2007-2009 (HH surveys)
	% HH w/children<5 correctly storing drinking water (confirmed by observation)	Haiti Kenya Malawi	2007-2009 (HH surveys) 2007-2009 (HH surveys) 2005-2008 (HH surveys)
	% HH w/children<5 obtaining method by source of supply	Benin Haiti Kenya Malawi Rwanda	DHS 2006 - HH survey 2009 2007-2009 (HH surveys) 2007-2009 (HH surveys) 2005-2008 (HH surveys) 2007-2009 (HH surveys)
	<b>Intermediate Results</b>		
<b>Improved knowledge</b>	% HH w/children<5 who know diarrhea can be contracted from water	Haiti Kenya Malawi Rwanda	2007-2009 (HH surveys) 2007-2009 (HH surveys) 2005-2008 (HH surveys) 2007-2009 (HH surveys)
	% HH w/children<5 who know they need to treat their water	Haiti Malawi Rwanda	2007-2009 (HH surveys) 2005-2008 (HH surveys) 2007-2009 (HH surveys)
	% HH w/children<5 that know they need to appropriately store water	Malawi	2005-2008 (HH surveys)
	% HH w/children<5 that can cite one or more appropriate project-promoted water treatment methods/products	Haiti Rwanda	2007-2009 (HH surveys) 2007-2009 (HH surveys)
	% HH w/children<5 who know where to purchase POU products	Malawi (scaled) Haiti (scaled)	2005-2008 (HH surveys) 2007-2009 (HH surveys)

		Kenya	2007-2009 (HH surveys)
		Rwanda	2007-2009 (HH surveys)
<b>Improved access</b>	% consumers residing within a specified distance from a water treatment product sales outlet	Kenya Malawi Rwanda	2007-2009 (HH surveys) 2005-2008 (HH surveys) 2007-2009 (HH surveys)
<b>Enabling Environment</b>	Appropriate government authority accepts registration of POU product		To be gathered from appropriate government authority in each country
	Appropriate government authority establishes quality standards for product to be regulated.		
	POU included in government's WASH policies		
	POU included as an element of government's infrastructure projects		

**Table 2: POUZN Zinc Program Results Reporting Plan**

<b>Strategic Objective</b>	<b>Indicator</b>	<b>HH survey questions</b>	<b>Reporting Countries Period</b>
<b>Increased correct use of zinc with ORS/ORT as a treatment of uncomplicated diarrhea in children under five</b>	% children under five who had diarrhea within the preceding 2 weeks who were treated with zinc	Did you give the child a zinc product (to treat the diarrhea)	Benin: Baseline HH survey on ORS use/DHS 2006 Benin: Endline HH survey November 2009 Nepal: Baseline = DHS 2006 Nepal: Endline HH survey, August 2008 Madagascar: Baseline DHS/2008, HH survey Nov 2008 Madagascar: Midterm HH survey OpsResearch March 2009 Madagascar: Endline HH survey, POUZN Nov 2009
	% children under five who had diarrhea within the preceding 2 weeks who were given ORS/ORT in conjunction with zinc	Was the child given ORS to drink at any time? Was the child given a recommended home fluid? Did you give ORS/ORT along with zinc product?	
	% children under five who had diarrhea within the preceding 2 weeks who were given the correct amount of zinc for the full 10 days	For how many days did you give zinc tablet to (child)?	
	% children under five who had diarrhea in the preceding 2 weeks who were treated with zinc by source of supply	Where did you go to obtain the zinc product? Also, sales by source.	
	% of providers, pharmacists, and other drug sellers (including community-based distributors who recommend zinc treatment along with ORS/ORT as the first line treatment for diarrhea vs anti-biotics or anti-diarrheals	Mystery client surveys	

	Number of cases of child diarrhea treated through USG-supported programs	Sales by source, HIS data??
	Number of people trained in child health and nutrition through USG-supported health programs	Training session reporting
<b>Intermediate Results</b>		
<b>Increased knowledge</b>	% of caregivers of children under five who know that zinc needs to be administered along with ORS/ORT	Scaled questions: zinc with ORS/ORT should be used for every type of diarrhea. Zinc should be given with ORS.
	% of caregivers of children under five who are aware that zinc is an appropriate treatment for diarrhea.	Scaled questions: zinc with ORS/ORT is the most effective treatment for diarrhea.
<b>Increased access</b>	% caregivers of children under five who know where to obtain zinc	Scaled question: I don't know where to get zinc tablets. Regular question: Where did you obtain zinc tablets? Do you know where you can get zinc product?
	% of consumers residing within a specified distance of a zinc treatment product.	Scaled question: zinc tablets are available within walking distance from my home.
<b>Enabling Environment</b>	# of zinc products/brands registered at appropriate dosage and indication	Drug authority information
	Zinc legally permitted to be sold over-the-counter	Drug authority information
	Quality control standards established and regulated through appropriate government entity	Drug authority information
	Incorporation of zinc into national protocols and programs for the treatment of diarrheal disease	Ministry of Health data