



WASHplus Year Five Annual Report

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ABOUT WASHPLUS

WASHplus project supports healthy households and communities by creating and delivering interventions that lead to improvements in WASH and household air pollution (HAP). This multi-year project (2010-2016), funded through USAID's Bureau for Global Health and led by FHI 360 in partnership with CARE and Winrock International, uses at-scale programming approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under age 5 globally.

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TABLE OF CONTENTS

| | |
|--|----|
| INTRODUCTION..... | 1 |
| COUNTRY UPDATES..... | 2 |
| INTEGRATION..... | 12 |
| INNOVATION..... | 18 |
| CROSS-CUTTING ISSUES..... | 21 |
| Monitoring, Evaluation, Research, and Learning (MERL)..... | 21 |
| Knowledge Management..... | 23 |
| ANNEX A..... | 25 |
| Initial Results of Nepal WTP Study..... | 25 |
| Annex B..... | 26 |
| SPLASH Life of Project Achievements..... | 26 |

ACRONYMS

| | |
|-----------------|---|
| CCT | Controlled Cooking Tests |
| CIES | Comparative International Education Society |
| CLTS | Community-Led Total Sanitation |
| ECD | Early Child Development |
| EOP | End of Project |
| FANTA | Food and Nutrition Technical Assistance |
| FSM | Fecal Sludge Management |
| GACC | Global Alliance for Clean Cookstoves |
| HAP | Household Air Pollution |
| HQ | Headquarters |
| IRB | Institutional Review Board |
| KPT | Kitchen Performance Test |
| KM | Knowledge Management |
| M&E | Monitoring & Evaluation |
| MERL | Monitoring, Evaluation, Research, and Learning |
| MHM | Menstrual Hygiene Management |
| MOH | Ministry of Health |
| NDSPNC | Regional Directorate of Sanitation and Pollution and Nuisance Control |
| NTD | Neglected Tropical Diseases |
| O&M | Operations and Maintenance |
| ODF | Open Defecation Free |
| PPPHW | Global Public-Private Partnership for Handwashing |
| PTA | Parent Teacher Association |
| REGIS-ER | Resilience and Economic Growth in Sahel-Enhanced Resilience |
| RI | Rotary International |
| SDA | Small Doable Actions |
| SO | Strategic Objective |
| SPLASH | Schools Promoting Learning Achievement through Sanitation and Hygiene |
| UNC | University of North Carolina |
| WASH | Water, Sanitation, and Hygiene |
| WHO | World Health Organization |
| WTP | Willingness to Pay |

INTRODUCTION

At the end of its fifth year, WASHplus has stories to tell, results to share, events to celebrate, and studies that add to the evidence base. WASHplus activities serve as the backdrop for many stories: the Zambian school girl who has access to privacy and menstrual supplies when she needs them, the Malian household that can now build an improved latrine on their rocky soil, the mother in Bangladesh who understands the importance of a feces-free environment, the Nepali home breathing cleaner air as it trials an improved cookstove. And perhaps more compelling than the individual stories are the results the project is beginning to record through endline data collection in Kenya and formative research on school enrollment and in Zambia. Providing water, sanitation, and hygiene (WASH) infrastructure to schools is having a notable impact on enrollment. Community-led total sanitation (CLTS) may be inoculating communities exposed to cholera. Numbers also tell the story of the project's impact. Look for a snapshot of those figures throughout this report.

The conclusion of field activities in Uganda and Zambia this year provided opportunities to reflect, celebrate accomplishments through end-of-project (EOP) events, and share lessons learned. Several articles were published this year in peer-reviewed journals and others submitted on topics ranging from consumer preferences and willingness to pay for improved cookstoves to habit formation and costing of handwashing. WASHplus also played a key role in preparing the joint document on WASH and nutrition for publication and distribution.

WASHplus's focus on integrating WASH into other development initiatives enabled the project to get in on the ground floor on subjects that are gaining traction at USAID and globally, such as WASH and nutrition, neglected tropical diseases, and MHM. This integration focus dovetailed nicely with the project's mandate to serve a technical leadership role, and project staff had many opportunities this year to share its work and lessons from the field on a global stage, strategize with partners on important advocacy issues, inform policy, and develop guidance in multiple countries. Also toward that end, WASHplus launched its first two learning briefs on small doable actions and WASH and nutrition. This series details the variety of approaches WASHplus uses to improve WASH and household air pollution (HAP) across its portfolio of countries.

And finally, it's been an exciting year for innovation with pilot projects underway in Ethiopia and Bangladesh focusing on sanitation marketing and sand envelopment. These two efforts will add to WASHplus's body of knowledge on sanitation innovation and aligns closely with USAID's global interest on the topic. WASHplus is also documenting its fecal sludge management work in Madagascar to tell the next chapter in that story.

COUNTRY UPDATES

WASH

Bangladesh

WASHplus was granted a no-cost extension in May to continue activities into early 2016. In Year Five, WaterAid supported partner NGO SAP, investing in activities to maximize sustainability. Local partners, union facilitators, and trained volunteers mobilized communities around the benefits of WASH via household visits and awareness campaigns and supported community development forums to help communities achieve and maintain open defecation free (ODF) status. In addition, WASHplus worked closely with other USAID implementing partners, SPRING and SHIKHA, to integrate WASH into their nutrition activities.

Over the course of this year, WASHplus successfully met or surpassed all proposed targets (revised in October 2014) and expanded to a new *upazila* (district), Satkhira, where the focus is on construction of innovative water technologies in challenging environments. Through installation of water technologies, 36,646 people gained access to an improved drinking water source (49 percent above target). As a result of nonhardware activities, such as reinforcing key hygiene and sanitation behavior changes through CLTS and the small doable actions (SDA) approach, WASHplus successfully decreased the prevalence of open defecation and increased the number of people using latrines and practicing improved WASH behaviors, like handwashing with soap.

To maintain and ensure sustained services, WASHplus put in place skilled personnel and mechanisms for upkeep, maintenance, rehabilitation, and eventually new service delivery in the target communities. To date, the program has trained 1,450 caretakers to maintain WASH facilities. In Year Five, WASHplus conducted handover activities with local partners and beneficiary communities. WASHplus engaged with local government authorities to ensure the capacity transferred over the course of the project has and will be maintained. Part of the local government's commitment is also to support the WatSan Committees as a mechanism for financial and technical sustainability.

WASHplus also successfully organized dissemination workshops for the National Hygiene Strategy whose objective is to promote the sustainable use of improved water supply and



19,025
new latrines



6,239
household latrines
for the poor using
project funds



285
communities
certified ODF

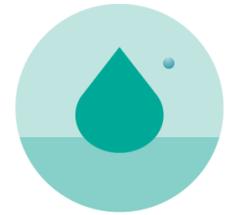
sanitation infrastructure and to create an enabling environment that will ensure comprehensive hygiene promotion and practices to reduce water and sanitation-related illness.

To address the challenge of “leaky latrines” (poor quality pits, seals, and overall design) and related environmental contamination, WASHplus applied USAID core support for sanitation innovation funds to document the effectiveness of sand envelopment as a mitigation measure for reducing groundwater contamination. Through competitive procurement, the research is being carried out in the Galachipa upazila in partnership with ICDDR,B, with logistical support from WaterAid and SAP. (See Innovation section for details.)

To increase access to water and sanitation facilities and strengthen coordinated and integrated WASH-nutrition programming, WASHplus collaborated with SPRING and SHIKHA in Daulatkhan and Char Fasson upazilas with a focus on sanitation, in general, and safe disposal of child and animal feces, in particular. The emphasis has been on strengthening the competencies of community outreach workers to negotiate WASH improvements as an integral part of their nutrition and child feeding activities through training and focused job aids. This year, 154 new tube wells were installed in the two overlapping upazilas. Moreover, a total of 1,401 latrines have been constructed in the overlapping upazilas this year, and 93,196 individuals gained access to improved sanitation.

With the assistance of the SPRING project/Barisal divisional office and support of its Technical Officer-Nutrition, WASHplus further documented existing child feces disposal practices in rural areas aiming to identify SDAs to improve safe feces disposal by age cohort. These SDAs were further refined in a training workshop with SHIKHA program managers and incorporated into job aids (under final development) and capacity building materials. WASHplus also developed a master trainer’s program for SHIKHA’s program managers (about 50) and partner VGO staff and conducted the first of two training of trainers in August.

The work in Bangladesh was presented at a number of key conferences and highlighted



58,730
experienced
improved water
access



25,317
household
handwashing stations



WASHplus continued to follow up with the local sanitation entrepreneurs that were trained last year to ensure they are continuing to participate in community mobilization activities and create demand for sanitation services.

in WASHplus learning briefs, which are detailed in other sections of this report. Finally, an independent evaluation of WASHplus accomplishments in Bangladesh is scheduled to begin early in FY16, having been postponed while USAID finalized procurement.

Benin

In Year Five, WASHplus's peri-urban hygiene improvement pilot in Cotonou expanded from households into schools and health centers. By the end of the third quarter, community outreach workers carried out 5,447 home visits to over 800 households to conduct face-to-face communication and demonstrations on topics ranging from installing and using handwashing stations, treating household drinking water, and using toilets. These efforts were complemented by hygiene sessions for women's groups and for mothers and caretakers at health center vaccination sessions; videomobiles and radio call-in shows reinforced the messages to households.



1,374
household
handwashing stations

The launch of WASH in 10 target neighborhood schools has engaged children, school administrators, and parent teacher associations (PTAs). School-based activities included training teachers to make various models of tippy taps and providing instruction on how to create a WASH-Friendly school. WASHplus is supporting a competition among schools to promote achievement of WASH-Friendly status. WASHplus continues to pursue partnerships with local funding entities to complement hygiene activities with sanitation, especially to address institutional bottlenecks to build or repair toilets in schools. Schools have proven to be enthusiastic participants in hygiene improvement actions after encounters with staff from WASHplus implementing partner ABMS/PSI. Handwashing and drinking water stations are being installed in many of the schools.

Program staff participated in a CLTS training and field visit to three ODF villages in the Zou Province in April. At the start of FY16, we will launch an adapted version of CLTS in the pilot neighborhoods and document the experience, a first in Benin.

In addition to the community work, WASHplus with ABMS/PSI organized major hygiene promotion events around Global Handwashing Day and World Water Day, which provided opportunities to demonstrate handwashing and water treatment, engage the community, especially children, and involve local and provincial government officials. A delegation from the Ministry of Health (MOH) visited the pilot neighborhoods to see the evolution of the program. At a debriefing, the delegation expressed its satisfaction at how households appeared to be taking hygiene improvement to heart and making changes. The Benin Mission approved a no-cost extension of activities through the end of March 2016, which will allow WASHplus to carry out a post-intervention study to assess changes in household water and hand hygiene practices.

Burkina Faso

Despite an ever-changing, sometimes precarious political landscape in Burkina Faso, WASHplus's only in-country WASH and neglected tropical disease (NTD) activity is underway. WASHplus collaborated with the MOH to identify the project implementation zone (Manni District in Gnagna Province)—a region that coincided with the priority areas of USAID and the Resilience and Economic Growth in Sahel-Enhanced Resilience (REGIS-ER) project and the activities of other WASH partners such as UNICEF. WASHplus is about to award a subagreement to the local organization *Association Chant de Femme* to lead implementation efforts in the villages selected in Manni District. Villages were selected randomly using a participatory process.



With help from a local artist, WASHplus is augmenting existing materials with specific NTD-related messages.

WASH-NTD Coordinator Edouard Tianhoun and Lonna Shafritz, WASHplus Technical Advisor, finalized the messages required for WASH and NTD counseling cards that will focus on incorporating WASH practices particularly relevant to the NTDs of concern (soil-transmitted helminth infections, schistosomiasis, and trachoma), such as face washing, shoe wearing, and reducing contact with surface water. These have been discussed with the MOH and partners in the field. The team will follow the local validation process in partnership with the ministry to ensure that the materials are accepted.

WASHplus finalized the baseline questionnaire and received institutional review board (IRB) approval from FHI 360 and the local IRB in Burkina Faso. The team hired the research institution *Centre de Recherche en Sante, Nouna* to conduct the baseline survey and purchased the tablets required to collect the data electronically.

Partnering with other organizations doing NTD work will extend the pilot's reach, and toward that end WASHplus is serving as a member of the WASH in Emergencies working group led by UNICEF and the Government of Burkina Faso. In addition, WASHplus has agreed to assist Sightsavers and Development Media International as they prepare a radio campaign to educate listeners about WASH and NTDs. WASHplus is collaborating closely with Helen Keller International, REGIS-ER, UNICEF, and the government as this project rolls out.

Kenya

WASHplus hired ORB International to conduct the endline in Kenya. This was accomplished in June/July, and WASHplus is currently analyzing the data and will have results to share in the first quarter of FY16. WASHplus has hired a consultant who has identified and is gathering additional cost share.

Mali

USAID/Mali approved an additional six-month costed extension of the WASHplus Mali activity in June 2015, requesting the project focus on sustaining and consolidating achievements and disseminating learning from the experience to other WASH programs. The project will now continue through April 2016, with field activities ending in February 2016.

Activities in Mali progressed at a steady pace this year with notable achievements. Since the outset, WASHplus's approach in Mali has been to work closely with regional and district government on strategy and implementation. This relationship has been formalized through memoranda of understanding (MOU) with several regional and district technical services (Water, Sanitation, Health). These MOUs have been renewed to secure continued participation and have enabled the project to support World Toilet Day activities; develop a Framework for Regional Dialogue in WASH; continue financial support to mothers of malnourished children who accompany their children to life-saving treatment at hospitals in Bankass and Bandiagara; and engage technicians from the Ministry of Water to supervise the water point rehabilitation. The project rehabilitated 48 water points—large diameter wells and boreholes. District lab technicians collected water samples from each site and analyzed them for arsenic and fecal coliforms and treated as needed.

The field teams supported 100 of 180 villages to develop action plans to maintain their ODF status, and the technical teams conducted post-certification monitoring using the WASHplus-developed tool.

Screening infant children for malnutrition continued. Local implementing partners have noticed a recurring trend: fewer severely malnourished children in the project intervention zone than in adjacent communities. Anecdotal evidence suggests WASHplus's presence has positively influenced the incidence of severe malnutrition with complications, with only ten cases reported being treated at nutrition rehabilitation units for the entire year from the 120 project intervention villages in Bankass and Bandiagara.¹

The Regional Directorate of Sanitation and Pollution and Nuisance Control (NDSPNC) invited WASHplus to participate in the National Forum on Water and Sanitation in November 2014. WASHplus, the only USAID-funded project to be represented at this high-level gathering, showcased four different models of improved latrines in booklets and posters. The



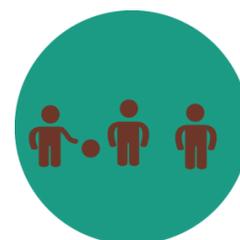
125

villages certified ODF



1,395

**new latrines
(252 rehabilitated)**



18,065

**children screened for
malnutrition**

¹ This is .08 child per intervention village compared to .2 children per village for the 899 nonintervention villages. In Mopti District, the nutrition rehabilitation activity is managed by Save the Children.

project manager participated in the National Implementation of Post-ODF workshop in September 2015 in Bamako.

WASHplus has shared its WASH-nutrition integrated approach in numerous ways this year. Two WASHplus representatives participated in a regional UNICEF workshop in Niamey, Niger, aimed at operationalizing a regional WASH-nutrition cluster strategy. The private sector advisor and the regional director of NDSPNC represented WASHplus Mali at AfricaSan 4 in Dakar, Senegal, contributing impressive project results to the theme “Making Sanitation for All a Reality in Africa.” Project Manager Sahada Traoré participated in the first ECOWAS (Economic Community of West African States) forum on Good Practices in Health in Burkina Faso and along with WASH Integration Specialist Renuka Bery, presented results on WASH and nutrition integration on Mali and Uganda at the Integrated Nutrition Conference in Nairobi, Kenya, organized by Catholic Relief Services in September 2015.

The pilot sanitation marketing activity is progressing. Two demonstration sites in Sévaré and two in Bandiagara were built to showcase the various models of improved latrines. Communication agency STARCOM is producing materials such as posters, technical brochures, a radio spot, video sketch, communication strategy, and media plan, which have been tested with target audiences, reviewed, and revised.

The WASHplus project team organized a three-day workshop in Bandiagara with the NGO implementing partners and technicians from District Technical Services detailing a strategy for sustaining behaviors triggered by the highly successful CLTS campaign. Outputs from the workshop included a set of monitoring tools to track adoption of the key health/nutrition behaviors promoted during the project and a strategy to promote friendly competition among certified villages by awarding prizes to the villages with the highest scores.

In other notable activities this year WASHplus:

- Helped develop the content and supported a radio broadcast on breastfeeding, which included themes on handwashing and food safety
- Documented the project’s achievements and collected final footage and interviews from various stakeholders (including USAID)
- In collaboration with Office of the Regional Directorate of Water, organized and facilitated a training for water repair technicians from the 18 intervention communes
- Incorporated Ebola-specific messages into its outreach
- Encouraged adoption of the point-of-use water treatment product Aquatabs; 146,727 single-use treatment packets were sold this year



22,835
participated in
cooking
demonstrations

Uganda

Work in the final year included producing a series of 19 negotiation cards (job aids) for volunteer health technicians, HIV peer educators, clinical counselors, and others in English and two local languages. Two capacity building guides, one for Integrating WASH into Nutrition and the second for Integrating WASH and HIV were also updated based on the WASHplus experience in training and building district capacity. These guides are also available through the districts, USAID implementing partners, and [here](#).

Final USAID WASH grants were made through the USAID Strengthening Decentralization for Sustainability project, with specialized technical assistance offered by WASHplus in areas including:

- Facilitating CLTS
- Making Schools WASH-Friendly (including appropriate hardware like rainwater harvesting for increasing water access and MHM to increase girls participation, attendance, and dignity)
- Forming and supporting community WASH management structures such as water management committees to address operations and maintenance (O&M)

Districts and USAID implementing partners participated in the WASHplus closing event in mid-December, “Working with Districts to Improve Water and Sanitation to Improve the Health and Resilience in Southwest Uganda: Success, Opportunities, Challenges, and Lessons Learned.” The event celebrated accomplishments such as the institutionalization of WASH behavior change approaches like small doable actions. Notable in Uganda was the application of the SDA approach to food hygiene, in conjunction with SPRING and Community Connector, to address local challenges of keeping food safe; issues of water quantity and access (constructing various “do-it-yourself” rainwater catchment systems); HIV care and support in the home and clinic; and home sewn reusable menstrual pads for women and girls of all ages. An EOP review was prepared for the event and is available [here](#).

Anecdotal evidence and testimony of implementing partners and district government, as well as affected households, all indicate that incorporating new “best practices” into their project work and improved WASH practice is making a difference in the lives of young children, people living with HIV and AIDS, and other vulnerable households. SDAs are now a familiar phrase and a new way to negotiate behavior change. A set of legacy materials stay behind to support sustainable



Girls take MHM into their own hands as they make reusable menstrual pads, one of the many small doable actions WASHplus helped to promote in Uganda.

practice and continue to build capacity in the cadres of outreach and clinical workers committed to improving WASH, child growth, and the lives of families affected by HIV.

Zambia

Year Five of WASHplus was SPLASH (Schools Promoting Learning Achievement through Sanitation and Hygiene)/Zambia's final wrap up year, one that comprised both intense work to meet the ambitious construction and training targets, and also one that made room for reflecting, taking stock, and sharing, both qualitatively and quantitatively, the achievements and lessons learned generated by this unique and comprehensive WASH in Schools program. Happily, targets were met and mostly exceeded, and lessons were articulated during staff and partner gatherings. In addition to this good news, fact finding missions to numerous schools revealed that SPLASH activities have generated "unexpected consequences" in terms of community development: hundreds of household latrines and handwashing stations have sprung up, improved water supply and motivation has led to building of classrooms, health posts, teachers' houses, libraries, and more. Artisans trained and employed by SPLASH to construct latrines have gained marketable skills that are leading to better economic opportunities. School children have become powerful advocates in their homes and communities for improved WASH, and teachers are experiencing renewed commitment to good teaching.

The theme throughout all task areas in FY15 was sustainability post-SPLASH. Construction of WASH facilities in the 400+ schools continued until the end of the year, with an additional focus on group and permanent handwashing stations and girls' washrooms. For a detailed look at targets and achievements, see Annex B.

Hygiene education focused on building the capacity of the district and zonal teacher resource centers to deliver participatory training on how to integrate WASH in classroom lessons. This generated lesson plans and materials that were used in the [SPLASH WASH teacher's guide](#) and in classrooms. SPLASH continued supporting pupil WASH Clubs throughout the districts, and these became autonomous and creative in how they carried out WASH peer-to-peer and community-focused hygiene promotion. Their influence can be seen in the nearly ubiquitous practice of handwashing in SPLASH schools. Group handwashing was trialed in various schools with simple stations that accommodate 10 or more children. MHM training and advocacy was carried out for schools and surrounding communities, including making pads, using washrooms, psychosocial support accompanied by brochures.

Global Handwashing Day on October 15 was combined with ODF celebrations in Chief Madzimawe's chieftdom, attended by 15 chiefs from across Zambia. Chiefs in Chadiza also mobilized and requested funding for WASH in all schools. Menstrual Hygiene Day was celebrated on May 28 in Eastern Province at a SPLASH school, with a stirring [performance](#) by the Magwero School for the Blind. As a finale to SPLASH work and an outcome to school-led total sanitation, the project joined forces with the District Education Board Secretary (DEBS) teams and carried out WASH-Friendly Schools assessments; 133 of 148 schools attained WASH-Friendly status as of mid-August.

SPLASH concentrated efforts on conducting business skill and opportunity training for area pump menders and local artisans, including onsite mentoring and on-the-job training, and distribution of pump repair toolkits to designated centers. These trained workers are now available to schools and communities to repair and maintain water points. To further support sustainability, SPLASH distributed the [school WASH O&M guidelines](#) to all schools. SPLASH successfully advocated at district and school levels for increased school and district budgets for WASH, especially for consumables such as toilet tissue, soap, and menstrual pads.

Two research activities continued during the year. The longitudinal school outcome study measuring learning achievement proxies continued for terms 2 and 3, having covered term 1 last year. WASHplus and SPLASH carried out the analysis, which has yielded the exciting finding that WASH can reduce absenteeism by 50 percent (see MERL section for details). The MHM qualitative study data collection ended in August with transcription and coding going through September. Monitoring of project activities' progress was greatly enhanced by the SPLASH database being up and running all year in every district.

Key SPLASH documents were finalized and disseminated before and during the EOP event in August. They include the O&M guide, teacher's guide for WASH, updated [MHM toolkit](#) with new puberty education section, a photo booklet, and SPLASH Stories compendium

SPLASH carried out numerous school-based activities designed to mitigate any negative environmental effects of the program and to be in compliance with USAID regulations. Activities included tree planting from donated seedlings, establishment of school woodlots, and water quality testing of new boreholes and rehabilitated water sources.

During the final quarter, M&E Specialist Orlando Hernandez and Activity Manager Sarah Fry, as well as CARE USA's Peter Lochery spent time in Zambia supporting various SPLASH EOP activities. Ms. Fry and SPLASH Chief of Party Justin Lupele, with relevant provincial and district SPLASH staff, visited nearly 20 schools to assess progress and impact;



247,089
improved access to
drinking water



3,044
latrines constructed
to national standards

schools were not alerted in advance and the team attempted to visit the hardest to access. The team witnessed WASH and other improvements at household and community levels, economic opportunities linked to SPLASH, and more (see Sarah's [blog](#)). At the conclusion of the field trip, all SPLASH staff gathered for a daylong workshop to process and discuss the field visits and agree on the major achievements and lessons learned from SPLASH. These ideas informed the August 20 EOP event.

Eighty people attended the half-day EOP event, designed to showcase in an innovative way the different activities that SPLASH carried out to deliver a truly comprehensive school WASH program, what was learned in the process, and most importantly, to advocate for WASH to be adopted nationally by the Ministry of Education as a key element of quality education. The participants were divided into groups and made the rounds to eight themed stands that showcased a SPLASH intervention with its key activities, achievements, and lessons learned.

HAP

Bangladesh

This year, WASHplus received the consumer research findings from iDE and a draft 4Ps Marketing Mix and Behavior Change Strategy for New Improved Cookstoves and are working with the Global Alliance for Clean Cookstoves (GACC) to develop a number of knowledge products as well as our USAID deliverables, which will be forthcoming in early 2016.

Nepal HAP

WASHplus officially launched the Nepal cookstove field work. Over the course of the year, WASHplus selected and purchased trial stoves, performed controlled cooking tests (CCT) with local cooks and technical experts at the Berkeley Air Monitoring Group, and secured IRB approval (both local and FHI 360 scientific and ethical review). The in-home trials were delayed due to the April and May 2015 earthquakes, which also resulted in a change in planned study districts. While WASHplus was able to proceed in Nawalparasi and Dang, in Dolakha, sadly, many study homes were damaged or destroyed and WASHplus was not able to undertake the study there.

In-home trials began in June, and because of the early onset of monsoon rains, households were left to use the stoves over the course of the monsoon. In early September, WASHplus conducted Kitchen Performance Tests (KPTs) in Nawalparasi but was unable to do so in Dang because of political unrest and violence in the region. The WASHplus local market research team, Right Direction Nepal, also began the endline surveys and willingness to pay (WTP) assessments, also in Nawalparasi only. Those will be completed in October in Nawalparasi, and hopefully in Dang by November.

The final stoves selected for the study were:

- Prakti—two-pot, metal, portable with chimney

- Greenway—one-pot, metal, portable, no chimney
- EcoChula—one-pot, metal, portable fan stove, no chimney
- Xunda—one-pot, metal, portable, no chimney
- Current improved mud stove—two-pot, mud, fixed (nonportable), with chimney

Initial CCT results showed significant fuel savings over the traditional stove for all study stoves; the data were also submitted to GACC for use in its clean cooking catalog.

Initial WTP assessment results in Nawalparasi showed a 50 percent purchase rate (35 out of 70 homes), with a mix of lump-sum cash purchases and installment payments (through a local microfinance institution that agreed to collect payment twice/month over six months). See Annex A for details.

INTEGRATION

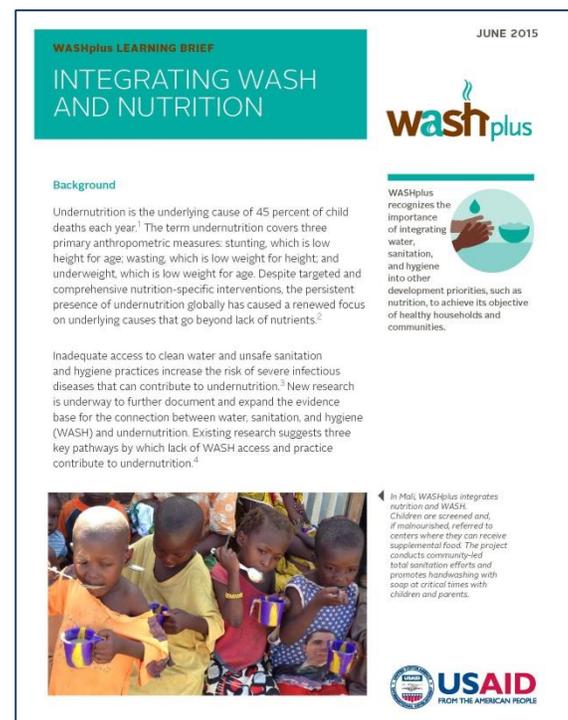
Overview

Integration continues to be a signature element of WASHplus, and arguably the ground where most of the innovation is occurring on the project. The project’s integration activities encompass informing policy and developing guidance along with field implementation. All WASHplus countries incorporate some level of integration in their activities, whether it’s WASH and nutrition in Bangladesh, WASH in Schools in Benin, or WASH and NTDs in Burkina Faso.

Implementation

WASH & Neglected Tropical Diseases

WASH-NTD integration is gaining prominence in the global community. Efforts by the World Health Organization (WHO) to bring these two sectors together have highlighted the importance of WASH in attaining NTD global elimination and control goals. The pilot activity in Burkina Faso should also illustrates the type of integration that is possible within countries. The development of tools and indicators should further the efforts of WASH-NTD integration.



WASHplus published a learning brief on WASH and Nutrition, the first in a series of briefs documenting key elements and experiences of the project.

In addition to the pilot activities in Burkina Faso (See SO 1), WASHplus has engaged substantially in several global efforts related to WASH and NTD integration this year. WASHplus participated in finalizing the F&E Guide (Facial Cleanliness and Environmental Control) developed by the International Coalition for Trachoma Control. This guide will help countries figure out how to implement the behavior change components necessary to address face washing and keep the environment clean. Ms. Bery reviewed and commented on WHO's WASH-NTD strategy and guidance documents that were launched at World Water Week in Stockholm. WASHplus team members also participated in a Delphi Process led by the SHARE Consortium to identify integration indicators related to WASH and NTDs. Though WASHplus did not attend the NGDO NTD Network meeting this year, Ms. Bery officially joined the NTD NGDO Network WASH Working Group and has actively participated in several conference calls that aim to promote WASH-NTD integration. WASHplus will present on WASH and NTDs at two conferences in early FY16: the American Society of Tropical Medicine and Hygiene and the UNC Water and Health conferences.

WASH & Nutrition

The stature of WASH and nutrition within the development community has risen exponentially since 2011 when USAID pitched the idea for a joint document to WHO. Five years later, the nutrition community has embraced the need for nutrition-sensitive approaches in which WASH figures prominently. USAID and other donors have issued requests for proposals that feature WASH and nutrition prominently, either as standalone activities or as an integrated component of other WASH or nutrition programming.

WASHplus spent significant time this year supporting the push to finalize the joint USAID, WHO, UNICEF document *Integrating WASH into Nutrition Programs* that is scheduled to be launched on World Toilet Day. The team developed some pre-launch materials and suggestions for World Water Week in Stockholm and the UNC Water and Health Conference. In addition, WASHplus published and disseminated the WASH and nutrition [learning brief](#) that describes how the project has implemented WASH and nutrition activities in various countries.

WASHplus shared its WASH and nutrition experiences at several conferences this year. Deputy Director Julia Rosenbaum led sessions at USAID's Mini-University on Food Hygiene and on Infant Poo. She also took part in a Global Public-Private Partnership for Handwashing (PPPHW)-sponsored webinar on Food Hygiene on the occasion of World Hygiene Day. Ms. Bery presented on Clean, Fed and Nurtured (CF&N) at the Comparative International Education Society (CIES) conference on WASH, nutrition, and early childhood development (ECD). She also presented on WASH and nutrition at the Water Engineering and Development Centre's conference in July. In September, Ms. Bery and Mr. Traoré from Mali presented at the Integrated Nutrition Conference organized by Catholic Relief Services in Nairobi, Kenya. The WASHplus implementation efforts shared on integrating WASH and nutrition and the pioneering work from Bangladesh on safe disposal of infant feces were well received.

Working closely with the CF&N community of practice, WASHplus identified activities and opportunities for promoting WASH, nutrition, and ECD. Activities conducted this year included sponsoring a webinar with the CORE Group’s Nutrition and Social and Behavior Change working groups and successfully advocating for including WASH in the Call to Action that the New York Academy of Science published on nutrition and ECD. WASHplus is very involved in developing and organizing a CF&N consultative meeting on indicators across the three disciplines that will be held in early FY16.

WASH in Schools

Menstrual hygiene management is gaining in global recognition as an essential element for keeping girls in school and thus is a critical element of WASH in Schools. WASHplus staff convened a coalition of local/international groups to organize a Washington, DC–based program for Menstrual Hygiene Day (May 28). The coalition includes more than 20 organizations.

WASHplus and SPLASH participated in and presented at the annual CIES conference (see SO3) on MHM and WASH as elements of a quality education. Dr. Lupele also spent time at HQ and presented an update on the SPLASH/Zambia program to interested colleagues from USAID and the education sector at FHI 360. See SO1 for details on the SPLASH program.

As discussed in the Uganda entry, WASHplus contributed to improved approaches to WASH-Friendly Schools in Uganda by adapting some of our global and Zambia-specific resources and guides, as well as developing job aids and guidance for WASH-Friendly Schools, including do-it-yourself menstrual pads. Even after project activities closed, WASHplus has been consulted by district government and local NGOs to share experience and resources.

WASHplus continues to participate in the global WinS (WASH in Schools) partnership led by UNICEF and was approached about jointly developing an advocacy document to promote private sector support for WASH in Schools; initial meetings have been held to develop a scope for the activity.

GLOBAL PARTNERSHIPS & TECHNICAL LEADERSHIP

Overview

WASHplus’s strategic partnerships and selection of conferences this year enabled the project to participate in vital global conversations on topics ranging from the Sustainable Development Goals to evaluating clean cooking and its benefits. The integrated nature of WASHplus programming meant that staff also attended conferences outside the WASH and HAP sphere, including MHM, education, NTD, and nutrition gatherings. The project also contributes to collective learning and information sharing through key networks, working groups, and specific

collaborations with partners such as PPPHW and Rotary International. Building off a well-received presentation at the 2014 UNC Water and Health Conference and a WASHplus webinar on the topic of habit theory, WASHplus authored a paper with Catalyst Behavioral Sciences, "The Science of Habit: Creating Disruptive and Sticky Behavior Change in Handwashing Behavior," set for publication in October in time for the 2015 UNC conference. The paper applies cutting-edge research on the brain and habit formation to the practical matter of changing handwashing habits.

Implementation

The Global Public-Private Partnership for Handwashing

The PPPHW brought on Dow Chemical as a resource contributor, which allowed the Steering Committee to expand the scope of its work. The [Global Handwashing Day](#) and PPPHW [website](#) were launched this year with a new look, new features (e.g., improved resource search, a key topics page, and language options), and new content; the website enhances the partnership's visual identity and its utility for handwashing implementers in the field.

On October 15, 2014, the PPPHW contributed to the largest Global Handwashing Day to date by disseminating materials, engaging on social media, and hosting an in-person and live-stream event (recording [available here](#)).

The PPPHW's largest advocacy push in FY15 was for a hygiene indicator in the Sustainable Development Goals. To achieve this, the PPPHW contributed to the Joint Monitoring Programme Communications and Advocacy Working Group, published a hygiene advocacy toolkit (with input from key stakeholders), sent an advocacy letter co-signed by nearly 100 organizations to the group deciding the indicators, published blogs, and distributed a petition.

To connect practitioners with practical tools for hygiene implementation, the PPPHW hosted two sessions of a new two-module [Distance Learning course](#). Other materials were produced and published online, including research summaries, a review of the evidence about children as agents of behavior change, an updated handwashing and Ebola factsheet, and a step-by-step guide to behavior change. The PPPHW also coordinated webinars, such as exploring hand hygiene compliance in the health care setting.

The PPPHW's profile was raised considerably through participation and presentations at conferences, including the UNC Water and Health Conference, the World Water Forum (Korea), and Stockholm World Water Week. PPPHW also attended AfricaSan 4 (Senegal) and hosted two sessions (a regional handwashing think tank and a session on scaling up hygiene behavior change); performed live event coverage via social media; advocated for hygiene in the Sustainable Development Goals among government and NGO delegations; and contributed to the drafting of the outcome agreement, the Ngor Declaration.

Joint Monitoring Programme Post-2015 Hygiene Working Group

WASHplus has supported technical discussions around the proposed targets and indicators and the inclusion of hygiene as part of the targets, especially discussing ways to integrate sanitation and hygiene indicators so that handwashing is tracked in the future. WASHplus, in conjunction with the PPPHW and other partners, participated in getting stakeholders to sign a letter by the WASH community to the UN Statistical Commission requesting that the hygiene indicator be kept. Through a collective effort undertaken by many and eventually defended by UN Water before stakeholders within the UN system, the word “hygiene” is now included in the Sustainable Development Goal language approved by the UN General Assembly in September 2015. WASHplus is happy to have been part of that debate and contribute to that final outcome.

Mr. Hernandez represented WASHplus at the World Water Forum and was able to get a post on the Sanitation and Water for All web page summarizing the behavior change challenges for reaching universal sanitation coverage. WASHplus has emphasized the importance of distinguishing coverage from appropriate and consistent and sustainable use of facilities. Consistent use by all family members, including the disposal of child feces, and sustainable use of sanitation facilities at the household level will require continuous support structures over time. WASHplus has participated in online discussions about sanitation slippage led by the Water Supply and Sanitation Collaborative Council to emphasize concern about the importance of support for sustainable use of the facilities.

Rotary International (RI)/USAID International H₂O Collaboration

A three-year renewal of the RI/USAID MOU took place earlier in the year. USAID members of the RI/USAID Steering Committee and confirmation of the first two focal countries, Ghana and Uganda, were finalized. Thirteen districts were identified among six focal regions to begin programmatic work by Rotary and Global Communities. In Ghana, the partnership planning and activity has commenced. Rotarians have already been working in close collaboration with Global Communities and Community Water and Sanitation Agency in the identification of districts with the highest need. District community meetings to inform the community about the partnership were held in Accra, the greater Accra area, and the northern regions. USAID is drafting a new RFP for Uganda, which means that activity for the partnership is delayed by three to four months and is likely to begin in February. Discussions at World Water Week in Stockholm with the Madagascar Mission have opened up a real opportunity for this country to be a third focal country.

To promote the partnership and share lessons learned, the committee is exploring ways within each organization to post documents and capture the stories of Rotarians collaborating with USAID. The first attempt to do so has been the creation of the RI/USAID International H₂O Collaboration partnership [webpage](#) on rotary.org. Not only are the documents created during the pilot posted on this page, but a space for blogging is dedicated to each focal country, where Rotarians will post updates.



The WASHplus booth at MH Day featured materials and tools developed for Zambian schools as part of the SPLASH project as well as stories of MHM in action.

led to a formalization of the DC MHM Coalition that will continue advocacy to policy makers and funders located in the DC area.

Menstrual Hygiene Day

WASHplus spearheaded the 2015 Menstrual Hygiene Day celebrations in Washington, DC, by convening the key local and international players representing about 20 organizations in MHM over the course of five months to organize an event on May 28. The event was held at FHI 360's Academy Hall, and showcased a range of programs and advocacy actions related to girl's education and MHM. Diana Sierra, CEO of Be Girl, gave the keynote address, and MH Day coalition members presented the main aspects of MHM in creative and participatory ways. About 100 people attended, including a reporter from NPR who interviewed attendees for a show on the topic. The event was "storified" by WASHplus's Taj Sheriff and made available via social media. This process has

Household Air Pollution Collaborative Activities

Over the course of this year, WASHplus has collaborated with numerous key cookstove sector partners, as detailed below. WASHplus contributed to a special issue of the *Journal of Health Communication* sponsored by the USAID-funded TRAction project published this year: *Advancing Communication and Behavior Change Strategies for Cleaner Cooking*, available [here](#). HAP Specialist Elisa Derby and Ms. Rosenbaum authored an article "Understanding Consumer Preference and Willingness to Pay for Improved Cookstoves in Bangladesh," and Ms. Rosenbaum co-authored the lead editorial, "Advancing Communication and Behavior Change Strategies for Cleaner Cooking" and served on the six-member editorial board, reviewing several of the peer-reviewed articles and shepherding the issue to completion.

Ms. Rosenbaum participated in a panel discussion at the National Press Club in Washington, DC, to discuss behavior change strategies for clean cooking. The event, sponsored by the TRAction project, highlighted lessons from the special issue mentioned above. Ms. Rosenbaum also traveled to Lima, Peru, in May to participate in a two-day workshop, *Beyond Distribution: Ensuring and Evaluating the Adoption of Clean Cooking and its Benefits*.

WASHplus has continued to participate fully in the International Standards Organization Technical Committee 285 (Clean Cookstoves and Clean Cooking Solutions) standards development process and serve on the GACC Women's Empowerment Fund proposal evaluation panel, the Social Impacts Work Group, and the Communications Task Group.

Ms. Derby organized and attended ETHOS 2015 in January in Seattle and ISO TC 285 meetings in Kenya and Guatemala. Ms. Derby was elected President of the Board, succeeding the previous president of 15 years, who stepped down from the position but remains on the Board. Other meetings attended included: USAID's Mini-University, Global Alliance Social Impacts Working Group, GACC Future Summit, and GACC Behavior Change Advisory Group.

Webinars/Presentations

- WASHplus helped to develop and participated in a two-day online Q&A session hosted and facilitated by The World Bank's Clean Stove Initiative.
- Ms. Derby and Ms. Rosenbaum presented at an Environmental Protection Agency/Winrock-organized and hosted [webinar](#) on willingness to pay for improved cookstoves.
- Two abstracts were accepted to the Clean Cooking Forum 2015 in Ghana in mid-November.

WASH Collaborative Activities

As part of its global leadership mandate, WASHplus staff participated in panel discussions and made presentations at the following WASH fora this year: PPPHW's Global Handwashing Day event, UNC Water and Health Conference (four side events, two presentations, and one poster), USAID's Global Infrastructure Conference, USAID Mini-University, 3rd Annual Virtual MHM Conference, FSM (Fecal Sludge Management)3, CIES Conference, WASRAG World Water Summit (Brazil), World Water Forum (Korea), WASH and ICT: Leveraging the Data Stream, Menstrual Health and Reproductive Justice Conference, AfricaSan 4, Regional UNICEF workshop in Niamey, Niger, Integrated Nutrition Conference (Kenya), Water Engineering and Development Centre Conference, SuSanA WASH in Schools Working Group and SuSanA WASH and Nutrition Working Group (Stockholm World Water Week).

INNOVATION

Innovation as a subobjective has meant that attention to the need or opportunity for innovation has permeated WASHplus work from the global to the local level. In Year Five, as in previous years, innovation is not limited to the specific activities identified and funded under SO4. Having led the introduction of habit theory to inform WASH behavior change approaches, WASHplus has also supported practical applications, for example through group handwashing activities within the Zambia SPLASH program. Our adaptation of a sanitation costing methodology to the economic analysis of handwashing has now led to a manuscript that hopefully will be published within the next several months. In Kenya, our development of inclusive sanitation options has led to both policy change and practical local construction applications. We have also introduced appropriate latrine design for different soil types in both Mali and Kenya.

An early WASHplus innovation project in Madagascar on FSM has informed a very successful follow-up investment by our partner Practica in another urban area of that country. Recognizing the increased global focus on FSM, WASHplus is producing a documentary of its FSM experience in Madagascar. The video will demonstrate how WASHplus engaged the international NGO Practica to design and pilot a private-sector service delivery model to manage fecal sludge generated in the city of Ambositra using low-cost technologies. The video will highlight the problem, the FSM solution (extraction, transport, and disposal), legal and social aspects of the project, and experience working with the private sector. The video will also show how working closely with the commune authorities, Practica selected and trained a local entrepreneur, developed a sludge burial site, experimented with a range of manual extraction methods and tools, and engaged in a social marketing campaign to promote the service. Filming will begin in October and the video is expected in December.



WASHplus is documenting its experience with FSM in Madagascar with partner Practica in a video to be completed early next year.

Two new innovation subawards were undertaken during the past year with WASHplus partner organizations: iDE for sanitation marketing in Ethiopia and ICDDR,B for the sand envelopment investigation in Bangladesh. The sanitation marketing work has now been completed and a final report on product design, sales, and recommendations for further scale up is expected next quarter; the sand envelopment work is ongoing.

After institutional and academic review and an on-the-ground study team assessment WASHplus significantly simplified the sand envelopment study design. WASHplus selected a total of 68 eligible study sites from a list of 200 beneficiary households in the Galachipa subdistrict where the project is subsidizing latrine construction for households identified as “hardcore poor” on government social inventories. The study is a two-arm randomized controlled trial of offset pour-flush pit latrines constructed in normally unsaturated soil conditions. Sites were selected based on baseline data that WASHplus collected during community situational analyses done in 2013. Three criteria were used to identify eligible households: 1) households with between four and 10 persons (to ensure standard hydraulic loading rates); 2) sites where new latrines can be constructed at least five meters from existing latrines; and 3) sites where the land donated by the household is not adjacent to surface water bodies.

During 2015, WASHplus worked with resource partner iDE on a nine-month activity in Ethiopia, intended to investigate and describe the potential for a market-based sanitation scale up in Ethiopia. With more than 50 million rural dwellers, Ethiopia presents an enormous opportunity to scale sanitation through market-based approaches. Co-financed with cost share provided by the Vitol Foundation, the project builds on the lessons from a UNICEF-funded, market-based sanitation pilot conducted by iDE in 2013 and lays the foundation for achieving scale. This project allows iDE to further build upon the product/business model they developed during the pilot stage and develop the necessary infrastructure of trained latrine business and sales agents.

WASHplus investment allows iDE to: 1) refine the design of latrine slabs to balance structural sturdiness and decreased transport costs; 2) use human-centered design to explore how to overcome pit collapse in areas where collapse is common; 3) determine the best price of latrine slabs and materials to optimize affordability and cash flow for supply actors and sales agents; 4) develop financing options for families wishing to purchase a latrine; 5) develop a sales process and tools to fit the new product/business model; 6) design a recruitment, training, and commission structure; 7) recruit and train existing/additional businesses and sales agents; and 8) introduce a sufficient mentoring/coaching system for businesses and sales agents. This project consisted of three key deliverables, described below. The original seven-month timeline, from January to August 2015, was extended to nine months, from January to October 2015 per iDE's request. iDE has submitted the first and second deliverables in both draft and revised versions in a timely manner.

In April 2015, iDE submitted its first deliverable, a report from a mini-deep dive to investigate opportunities to combat pit collapse. Major findings from report included the following: 1) the majority of pit collapse occurs during the rainy season, though the primary causes are unclear; 2) current household strategies for combatting pit collapse are almost exclusively limited to re-digging of the pit during the dry season, which causes temporary periods of open defecation; 3) pit lining products do not currently exist in the market place, though there is sufficient local expertise to experiment with local materials; 4) pit lining products may have potential in the marketplace, though more information is needed to determine household willingness to pay. iDE will conduct two subsequent rounds of prototyping and testing with households to determine viability of pit lining products in the marketplace.

iDE submitted its second deliverable, a report documenting progress in developing sales and manufacturing training materials, as well as training and mentoring of a sales force, in June 2015 (revised version submitted on July 10 based on comments from the WASHplus team). iDE and partner, Whitten and Roy Partnership, identified strengths and weaknesses of sales practices for latrine slabs, and created a direct sales strategy in Southern Nations, Nationalities, and Peoples' Region (the target region of the activity) that included the following key points: 1) increased commission of sales agents to address lack of motivation; 2) a redesigned sales conversation to be more personal/human-centered; 3) revised sales tools (such as brochures) and increased coaching of sales agents; 4) increase manufacturer's profit margins; and 5) a focus on door-to-

door sales, as well as an increase in the number of sanitation advisors operating within the catchment area.

iDE requested a no-cost extension of their final deliverable—a report on product design, sales, and recommendations for further scale up—from August 30, 2015 to October 31, 2015. The objective of the no-cost extension was to extend iDE’s work with sales agents and manufacturers, and refine training tools, to enhance recommendations for scale up. The extension was granted, and communications with iDE suggest they are on track to deliver their final report in full and on time, by October 31, 2015.

iDE Bangladesh completed the point-of-use filter paper activity using its own resources, so WASHplus financing/involvement was not needed.

Finally, WASHplus’s sanitation and innovation advisor attended the FSM3 conference in Hanoi, Vietnam, and presented learning from the WASHplus FSM pilot experience in Madagascar, and how the experience was replicated in the large coastal city of Tamatave.

CROSS-CUTTING ISSUES

Monitoring, Evaluation, Research, and Learning (MERL)

Monitoring and evaluation work this year included submitting project learning to global forums, conducting advocacy work, shepherding multiple studies through the scientific and ethical clearance process, and analyzing data from formative research in progress. Most MERL activities are incorporated into country-level descriptions under SO1. Others are listed below.

WASHplus also tasked two economists from FHI 360, John Bratt and Mackenzie Green, to conduct a costing study to understand the economic implication of not investing in handwashing using secondary data from four WASHplus countries: Bangladesh, Kenya, Mali, and Zambia. A draft report is expected in November.

The *Journal of Water, Sanitation and Hygiene for Development* accepted a WASHplus manuscript supporting the use of a proxy to measure handwashing practices in large scale surveys. This is part of the WASHplus effort to support the international tracking of handwashing practices using an indicator that was initially proposed under its predecessor project, the Hygiene Improvement project. It contributes to the empirical evidence in support of appropriate measures to monitor handwashing practices.

Other MERL work this year included the completion of the process to obtain scientific and ethical clearance for the implementation of the following studies: Kenya endline, the Nepal

Assessment of Consumer Needs and Preferences for Cookstoves, Investigating the Effects of Sand Barriers to Mitigate the Effects of Pathogen Leaching from Pit Latrines in Coastal Bangladesh, and the Burkina Faso baseline focusing on knowledge, attitudes, and practices regarding NTDs.

SPLASH completed the school outcome study in Zambia focused on three indicators: student absenteeism, teacher absenteeism, and student-teacher contact time. The study was implemented in 62 control and 62 intervention schools. SPLASH saw a value in tracking these indicators over time through a longitudinal approach as there is seasonality to absenteeism, and the study wanted to capture it and be able to compare it between schools without a WASH program and schools benefitting from one, especially when the WASH program includes both hardware and software elements, which is the case in SPLASH schools. The study collected student information from odd grades only. Data were collected from September 2014 through July 2015, representing three school terms and three different seasons.

As expected, student and teacher absenteeism changed over time with the highest rates occurring at the end of the school year and the lower rates in the middle of the school year, which was toward the end of the study tracking cycle. However, the drop in absenteeism was larger in intervention than in control schools, indicating that the intervention went beyond what would be expected generally in schools. The gap between intervention and control schools could be as high as 30 percentage points in some of the data points. The impact of the intervention occurred when controlling for other factors that can influence school attendance such as the presence of a school feeding program. The statistical weight of the existence of a full WASH program as a predictor of student absenteeism, for example, was three times larger than that of a school feeding program during one of the school terms. The impact of a WASH program was also beyond that generated by school feeding.

Contrary to expectations, however, the WASH intervention did not affect girls differently than boys. We did not find that school absenteeism was lower in girls than in boys. The WASH program seems to impact boys and girls alike.

Concerning **teacher absenteeism**, there is also a tendency for it to go down over time as one looks at the data from September 2014 to July 2015. The drop is steeper in the intervention schools, however, than in the control schools. Generally speaking, we found significant differences in **student-teacher contact time** between the control and the intervention schools. Contact time was higher in intervention than in control schools in the second and third terms as well as in the wet and cold dry seasons.

The endline in Kenya was completed and analysis indicates a drop in open defecation in rural areas, yet in favor of unimproved sanitation facilities. Anecdotally, however, the presence of larger sanitation coverage may have served as a buffer against cholera.

Knowledge Management

This year brought about a change in leadership for the KM team, Patricia Mantey was replaced by Antonia Wolff as KM advisor, formerly working with USAID's global nutrition project, SPRING. The team continued to expand its networks and found several new ways of sharing and disseminating information. In December 2014, the KM team organized a webinar featuring David Neal on Handwashing and the Science of Habit, followed by participation in a CORE Group-led webinar, featuring Ms. Bery on Clean, Fed & Nurtured in January of 2015. The WASHplus KM team worked together to develop a poster, the WASHplus Approach for Discovery, Collecting, Curating, and Disseminating WASH Sector Knowledge and Information, which was presented at the 2014 UNC Water and Health Conference.

The KM team also co-hosted, along with the FHI 360 and various other organizations, an event for Menstrual Hygiene Day, May 28. In promotion of that event, WASHplus co-hosted its first ever Twitter Chat, which generated a lot of attention and awareness on menstrual hygiene. The KM team also hosted its first ever Google Hangout featuring Patricia McArdle from Solar Cookers International on integrated cooking methods and use of solar cookers for food preparation.

Significant improvements were made to the WASHplus website, including adding a language function that translates the website into more than 60 different languages, from Afrikaans to Zulu. The home page was revamped, and a new search function on the resources page will greatly enhance user's ability to search and find WASHplus resources.

The KM team featured over 13 [blogs](#) this year, including a Q&A session on clean cookstoves with Corinne Hart from GACC, stories from Zambia, Bangladesh, World Water Week, and many others. Our social media activities generated more attention this year, garnering more likes and followers.

Knowledge Sharing Resources and Products

- The project's quarterly newsletter, *WASHplus News*, was circulated electronically in December, March, June, and September. Find all the past issues [here](#).
- The project's weeklies were circulated electronically as well and can be found here <http://www.washplus.org/washplus-weeklies-date>

Major activity briefs/publications completed this year and in the fourth quarter (available on the WASHplus [website](#)):

- Learning Brief: WASH and Nutrition finalized and disseminated July 2015
- Learning Brief: Small Doable Actions finalized and disseminated September 2015
- Brief: WASHing Away Worms and Other Neglected Tropical Diseases, 2015
- A Teacher's Guide to Integrating WASH in Schools September 2015
- School WASH Facilities: Operations and Maintenance Guidelines, 2015

- What is the USAID/WASHplus Benin Urban Hygiene Improvement Program? May 2015 French and English.
- Menstrual Hygiene Management: Toolkit. June 2015
- SPLASH Encourages a Community Approach to Menstrual Hygiene Management [July 2015](#)
- Baseline Survey of Peri-Urban Sanitation and Hygiene in Cotonou, Abomey-Calavi, and Porto-Novo, Benin
- Stories from the Field for Uganda, Mali, and Zambia

The KM team supported four webinars this year:

- **Handwashing and the Science of Habit**, featuring WASHplus consultant David Neal, organized by WASHplus, December 2015
- **Multisectoral Approaches to Improve Child Growth through WASH, Nutrition and Early Childhood Development** featuring Ms. Bery, organized by CORE Group, January 2015
- **Handwashing and Global Food Hygiene: A World Health Day Webinar**, featuring Julia Rosenbaum, organized by PPPHW, May 2015
- **Integrated Cooking Methods**, featuring Patricia McArdle, organized by WASHplus, May 2015

The project's LinkedIn community, Clean Cookstove Community, continues to offer great information on cookstoves and now has more than 100 members. Posts and discussion questions are added each week, not only by WASHplus but by members of the community, making it our most interactive community thus far.

The WASHplus Weekly updates continued to go out each week; 46 issues were published on such topics as WASH-Related Diseases, Design Thinking, WASH & Nutrition, and Sanitation Marketing.

Annual KM Social Media and Blog Statistics

Statistics for WASHplus blogs/news sites:

- Sanitation Updates—195,865 visits during the year
- IAP Updates—83,025 visits
- Urban Health Updates—74,643 visits
- Household Drinking Water Quality—91,243
- WASH/Nutrition Library—35,126
- The Innovation Exchange recorded 6,567 visitors this year.

WASHplus Twitter accounts

- The WASH twitter now has 2,211 followers compared to 1,605 followers last year.
- The WASH HAP twitter now has 176 followers compared to 109 followers last year.

ANNEX A

Initial Results of Nepal WTP Study

| | Costs to study participants | | # of participant buyers | | |
|------------------|-----------------------------|-----------------|-------------------------|-------------|-------|
| | Price cash | 12 installments | Cash | Installment | Total |
| Prakti | \$ 50 | \$ 8.60 | 1 | 3 | 4 |
| Xunda | \$ 46 | \$ 7.80 | 1 | 3 | 4 |
| EcoChula | \$ 29 | \$ 3.60 | 3 | 3 | 6 |
| Greenway | \$ 27 | \$ 3.20 | 4 | 5 | 9 |
| Mud stove | \$ 10 | \$ 1.20 | 8 | 4 | 12 |
| | | | | | 35 |

ANNEX B

SPLASH Life of Project (LOP) Achievements as of August 15, 2015, Against Targets

| RESULTS INDICATORS | LOP TARGET | ACHIEVEMENT (By August 15) | |
|--|------------|-------------------------------|--------|
| | | N | % |
| <i>Improved access to water supply</i> | | | |
| People in target areas with access to improved drinking water supply as a result of USG assistance | 250,000 | 247,089 | 98.84 |
| People in target areas with access to improved sanitation | 147,000 | 155,321 | 105.66 |
| New water points constructed / rehabilitated | 443 | 410 | 92.55 |
| Schools where teachers and learners are using water treatment and safe storage | 222 | 312 | 140.54 |
| Drinking water stations installed next to classrooms | - | 284 | - |
| Latrines constructed to national standards | 2,942 | 3,044 | 103.47 |
| Facilities to support menstrual hygiene management | 148 | 313 | 211.49 |
| <i>Improved hygiene practices among teachers and learners</i> | | | |
| Ignited schools implementing SLTS | 335 | 335 | 100% |
| Schools attaining WASH-Friendly status subsequent to implementation of SLTS | 148 | 133 | 90% |
| Schools with established WASH Clubs and trained peer educators | 370 | 370 | 100% |
| Handwashing facilities constructed | 507 | 614 | 121% |