

**WASHplus BRIEF**

# COUNTRY SNAPSHOTS AND RESULTS



Working in 11 countries over the past five years, WASHplus has created partnerships to develop evidence-based interventions that lead to improvements in water supply, sanitation, and hygiene (WASH) and household air pollution (HAP).

◀ *Zambian children show their pride in their WASH-Friendly school, a school that features clean improved latrines for girls, boys, and teachers; handwashing stations; clean drinking water; and hygiene education integrated into its curriculum..*

## Introduction

Each WASHplus intervention is tailored to address the unique needs of a given country—whether it be improving school WASH, enhancing household sanitation options, or marketing improved cookstoves. Over the past five years, the project has gained field experience that resonates beyond the local setting in areas such as:

- Applying small doable actions to build healthy households and communities through feasible and effective behavior change
- Improving access to and innovation in sanitation for different geographies, marketplaces, personal needs, and preferences
- Involving consumers, governments, and manufacturers to improve cookstoves and develop clean cooking solutions
- Integrating WASH with other development priorities—education, nutrition, maternal and child health, neglected tropical diseases, HIV/AIDS—for sustainability and scale

Below is a list of country summaries with a snapshot of results as of the end of 2015.

## Water, Sanitation, and Hygiene Activities



### Bangladesh (February 2013 to May 2016)

WASHplus's comprehensive four-year project aims to:

- Increase access to sustainable safe WASH solutions in marginal and geographically challenging districts
- Build community and local government capacity to operate and maintain water and sanitation facilities
- Strengthen coordinated WASH-nutrition programming in support of broader Feed the Future objectives

WASHplus works through resource and implementing partner WaterAid and local NGOs in five subdistricts, some overlapping with USAID's Feed the Future initiative. WASHplus addresses the challenging environment of the southwest with approaches that defy simple sanitation solutions. This requires innovation and collaboration with technical and community partners from the private, government, and civil society sectors—all working toward a feces-free environment.

As of December 2015, WASHplus constructed all planned WASH infrastructure, exceeding water point and latrine targets and reaching 154,729 individuals with access to sanitation and 94,200 individuals with improved access to drinking water. Partner NGOs successfully mobilized communities and local government institutions to exceed the WASHplus target of 512 open defecation free (ODF) communities; thus far 653 communities have been declared ODF.

WASHplus is also applying the small doable action approach to develop tools for integrating WASH into nutrition programs, specifically focusing on Essential WASH Actions and safe disposal of infant feces. Finally, WASHplus is using Sanitation Innovation Funds to explore the effectiveness of sand envelopment around latrine pits as a mitigation measure for reducing groundwater contamination. The study will be completed in June 2016.

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## Benin (October 2012 to May 2016)

In Benin's peri-urban neighborhoods few households have handwashing stations, proper latrines, or clean water. WASHplus is implementing a pilot hygiene improvement program to reduce household vulnerability to diarrhea and cholera and support municipal agencies responsible for urban WASH to improve health and quality of life in two of Cotonou's most neglected peri-urban neighborhoods, Agbato and Enagnon. The program emphasizes handwashing with soap and safe household drinking water. Poor access to sanitation is being addressed through a community-led total sanitation (CLTS) trial adapted to peri-urban conditions. WASHplus activities are intended to contribute to reducing morbidity of children under 5 living in these peri-urban zones.

To date, community outreach workers have carried out nearly 5,000 home visits to the 1,700 target 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. As a result, 1,762 handwashing stations were installed in homes and institutions. Hygiene sessions for women's groups and for mothers and caretakers at health center vaccination sessions, videomobiles, and radio call-in shows complemented household visits and reinforced the messages.

The launch of WASH in 10 target neighborhood schools has engaged children, school administrators, and parent-teacher associations. School-based activities include training teachers to make various types of tippy taps and providing instruction on how to create a WASH-Friendly school. WASHplus is also supporting the rehabilitation of school latrines.

## Burkina Faso (January 2015 to June 2016)

In 2013, the neglected tropical disease (NTD) unit at USAID gave WASHplus funds to explore the links between WASH and NTDs, focusing on trachoma, schistosomiasis, and soil-transmitted helminths. WASHplus conducted a literature review and then followed up with two country assessments in Bangladesh and Burkina Faso to determine which country would be best placed for a pilot integrated NTD program.

WASHplus began working on its pilot in Gnagna Province in eastern Burkina Faso, a USAID focus area, in early 2015, collaborating with the NTD unit at the Ministry of Health (MOH). WASHplus is working at the local district level with an integrated team that includes the ministries of Health; Water, Agriculture and Food Security; and Education. WASHplus collected baseline data, developed hygiene behavior change counseling cards using existing materials where possible and adding new practices related to NTDs, and hired a local organization to implement the pilot integrated intervention, beginning January 2016.

When the pilot program ends, results from the pilot model program and an associated toolkit will be available to be shared across the country as well as with other countries interested in integrating WASH and NTDs.



Community outreach workers (relais communautaires) from implementing partner ABMS/PSI learn how to make a tippy tap for handwashing at a WASHplus training in Enagnon.

In its WASH-NTD pilot program in Burkina Faso WASHplus encourages shoe wearing as one way to prevent exposure to a range of neglected tropical diseases.





## Kenya (January 2010 to September 2014)

WASHplus first worked with the Kenyan government to integrate improved WASH practices into HIV policies and programs. The project supported the MOH and its partners to integrate improved WASH practices into HIV policies, programs, and training. WASHplus accomplished this by working within existing structures under the MOH and other U.S. government bilateral partners to improve WASH practices

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*A WASHplus trained volunteer devised a system to guide Danson, a young blind man, from his house to his toilet using a nylon string. The WASHplus program in Kenya worked on expanding accessibility to sanitation for all using locally available materials.*

across Kenya. Later the project added a component to help the government advance sanitation uptake by generating demand for sanitation; this included introducing simple supportive technologies to vulnerable households and focusing on equity and inclusion—actions that became integral to the government's CLTS strategy.

WASHplus developed a training toolkit for WASH-HIV integration that the MOH endorsed. The materials were adapted and integrated into the government of Kenya's community health worker training curriculum. WASHplus's participatory training style and approach engaged facilitators and learners and encouraged local solutions to challenges in their communities. The innovative training methodology inspired participants to internalize the content and share it with others, and trained trainers continue to apply this methodology with the community. WASHplus, together with the MOH, trained more than 650 trainers (government and NGO actors) in WASH-HIV integration. Over 8,000 community health workers in charge of at least 400 community units were oriented on integration and inclusive sanitation. It is estimated that more than 1.6 million Kenyans were reached with inclusive sanitation messages. WASHplus also introduced WASH-HIV integration strategies and activities into government policy documents and guidelines.

The WASHplus rural sanitation pilot program in Kenya worked closely with the MOH and USAID-funded health projects to increase sanitation uptake in rural areas through the government-led CLTS program. CLTS trainers included district public health officers and community health extension workers. Triggering and increasing awareness of the need for sanitation facilities through CLTS+ spurred the uptake of improved sanitation at the outset. Some communities in the pilot sites requested designs for and adopted even better improved latrines. In addition, the project developed a latrine pit booklet to guide communities to dig latrine pits that are appropriate to the local conditions of their area. When the project ended in 2014, trained CLTS+ implementers had reached approximately 100 villages in the three pilot sites, and people living with disabilities gained life-changing supportive devices such as commodes, support bars, and guiding ropes—all made of locally available materials—installed in their homes. A review of communities in Migori County indicated that some villages that had participated in WASHplus's programs experienced zero cases of cholera during the January-February 2015 outbreak.

## Liberia (2012)

In 2012, at the request of USAID/Liberia, WASHplus conducted a month-long mid-term performance review of the I-WASH project, a five-year cooperative agreement (2010-2015) implemented by Cooperative Housing Foundation and subpartner Population Services International. The assessment identified factors enabling or impeding effective implementation of different project components and advised USAID/Liberia on any needed redirection of strategies or priorities. WASHplus submitted a final report with lessons learned and recommendations for future USAID/Liberia WASH programming. The review found that the I-WASH project demonstrated CLTS as a viable, strategic approach for achieving sanitation and hygiene impact in small rural villages that have strong social cohesion.

## Madagascar (January 2010 to September 2013)

To address the lack of sanitation options in densely populated areas of urban Madagascar, WASHplus explored public-private sanitation solutions in several communes. Under the USAID Hygiene Improvement Project, the predecessor project to WASHplus, constructing public toilets (WASH blocks) proved to be popular and profitable. But to keep them clean and lessen the negative environmental and health impact, managing the fecal sludge appropriately became an urgent priority. To address this gap in environmentally sound waste management practices, WASHplus engaged the NGO Practica to design and pilot a private-sector service delivery model to manage fecal sludge generated in the city sustainably using low-cost decentralized technologies. Working closely with the commune authorities, the project selected and trained local entrepreneurs, developed a sludge disposal site, experimented with a range of manual extraction methods and tools, and engaged in a social marketing campaign to promote the service. The pilot successfully demonstrated that demand for an environmentally safe sludge removal and treatment service exists in urban/peri-urban Madagascar. The activity introduced innovations in sludge removal tools, transport equipment, and disposal technologies new to Madagascar, thus contributing valuable learning to the emerging global fecal sludge management subsector. WASHplus is currently finalizing a video documenting this approach.

## MADAGASCAR RESULTS

WASHplus worked with WSUP to promote healthy hygiene and sanitation behaviors in households and institutions using a sanitation marketing approach and “WASH-Everywhere” strategy. Among the results:

- Newly constructed water kiosks improved access to drinking water for 19,419 people.
- The sale of SanPlat slabs improved access to sanitation facilities for 1,500 people.
- Nine new WASH-Friendly Institutions (seven schools and two churches) improved access to drinking water and sanitation facilities for 11,225 people.

*Trained workers use the Gulper to extract sludge from a row of pit latrines at an office building in Ambositra. WASHplus found that traditional tools (shovels and baskets) are more effective to remove sludge from dry pit latrines than suction pump models such as the Gulper.*



WASHplus also provided assistance to construct or rehabilitate fee-for-use public sanitation WASH blocks and water kiosks with resource partner Water and Sanitation for the Urban Poor (WSUP). The WASH blocks provide WASH services for pedestrians in high traffic areas such as bus stations and markets who previously had no hygienic options. Monthly users per facility average about 12,000, so over a year a WASH block will have more than 140,000 users, creating a critical need for fecal sludge management.

### **Malawi (September 2015 to June 2016)**

In 2015, at the request of USAID/Malawi, WASHplus initiated technical assistance to complete unfinished environmental compliance activities from a terminated grant. WASHplus is conducting an asset inventory for 32 boreholes and school latrines completed by the USAID grantee; testing water quality of the functional water points; facilitating necessary remedial actions for water points and school latrines; and officially transferring the water points and latrines to appropriate authorities. WASHplus procured the services of a Malawian consulting company to act as the local implementing agency for the activity. This agency is working closely with government authorities to complete these activities in Malawi.

### **Mali (March 2014 to May 2016)**

In Mali, WASHplus aims to improve the nutritional status of 187,000 women of reproductive age and 60,000 of their children (especially those under 2 years of age) in poor, rural households in 180 villages in three northern districts (Mopti, Bandiagara, and Bankass).



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*WASHplus trained community health workers, known as relais, to use upper armbands to screen infants for malnutrition and refer at-risk children to commune or district-level rehabilitation centers for food supplements.*

WASHplus emphasizes improving nutrition and hygiene practices through a range of behavior change approaches, including the core CLTS activity. The project also identifies and refers undernourished children to community health/nutrition centers for treatment. The government of Mali's national CLTS policy now incorporates the WASHplus-developed latrine options for different soil and hydrological conditions—flood-prone, sandy, and rocky. Further, the government has advocated the WASHplus practice of training masons prior to CLTS triggering to ensure that demand for latrine construction is met in a timely and responsive manner.

To date, over 75 percent of villages triggered by WASHplus have been certified ODF. Within these communities, almost 10,000 latrines have been constructed, rehabilitated, or upgraded since the start of this project, and more than 11,000 latrines possess a handwashing station. More than 50,000 people have improved access to water from newly constructed or rehabilitated water points. Further, households now understand that many water sources are not safe to drink and are purchasing water treatment tablets (over 30,000 tablets per quarter).

WASHplus has trained over 400 community extension workers to negotiate small doable actions to improve WASH and nutrition practices at the household level. Activities include CLTS triggering; cooking and water treatment demonstrations in the community; and individual household visits that focus on promoting exclusive breastfeeding, handwashing with soap, and nutrition counseling and referrals. In the target areas, the number of children referred for malnutrition has diminished drastically from 2,050 moderately malnourished children over a three-month period in 2014 to 334 over the same period in 2015 and from 269 severely malnourished to 38.

### Uganda (January 2013 to December 2014)

With funding from USAID/Uganda, WASHplus worked to reduce diarrhea and improve the health and resilience of key populations in three districts—Kabale, Kanungu, and Kisoro. This multidisciplinary initiative focused on three objectives:

- Integrating water, sanitation, food hygiene, and handwashing into nutrition and Feed the Future activities
- Incorporating water, sanitation, food hygiene, menstrual hygiene, and handwashing into community and clinic-based HIV activities
- Strengthening the capacity of local districts to plan, budget, implement, and monitor WASH-related activities

As a strategy for sustainability and scale, WASHplus bolstered district government and USAID implementing partner services and programs, rather than starting its own activities.

USAID partners and district government, as well as affected households, all indicate that incorporating new and improved WASH practices are making a difference in the lives of young children, people living with HIV, and other vulnerable households. Small doable actions are now a familiar phrase and a new way to motivate behavior change. A set of legacy materials—19 jobs aids (in three languages), including the first-ever created to promote small doable actions for food hygiene, and two capacity-building guides, one for integrating WASH into nutrition and the second for integrating WASH and HIV—were updated based on the WASHplus experience in training and building district capacity. WASHplus established demonstration latrines, tippy taps, potties for young children, and commodes for people with limited mobility in 15 health centers to motivate householders to try WASH improvements. And reusable pad making activities were held at numerous schools in the target districts as a way to address the topic of menstrual hygiene management.



*WASHplus established demonstration latrines, tippy taps, potties for young children, and commodes for people with limited mobility in 15 health centers in Uganda to motivate householders to try WASH improvements.*

*In Zambia's Eastern Province, SPLASH adopted the motto, "Let's Talk About It" to encourage dialogue about the once-taboo topic of menstruation.*



### **Zambia (October 2011 to September 2015)**

USAID supported Zambian government efforts to provide safe water, adequate sanitation, and hygiene education through the Schools Promoting Learning Achievement through Sanitation and Hygiene (SPLASH) project, implemented by WASHplus (FHI 360 in partnership with CARE/Zambia). SPLASH reached 616 schools in four districts in Eastern Province: Chadiza, Chipata, Lundazi, and Mambwe. Seeking to improve learning outcomes among students, SPLASH reached 246,000 children and their teachers and parents with a comprehensive WASH facility improvement and hygiene education program. SPLASH was firmly embedded in the USAID and government of Zambia education sector and, therefore, responded to both U.S. government water and sanitation access goals and educational goals of improved school performance.

SPLASH's overarching strategy was to work within and strengthen the existing system at scale to increase reach and impact. The system included national, provincial, and district government structures; the private-sector; and school/community-level systems. The project trained Ministry of General Education officials at the provincial and district level in project planning and budgeting, financial management, and WASH in Schools operations and maintenance (O&M) for sustainability.

SPLASH's Outcome Study showed that the presence of a WASH program can reduce absenteeism in schools by up to 50 percent, demonstrating that WASH is an undisputed key element of quality education. The SPLASH experience also yielded some surprising lessons. One of these is that providing attractive WASH facilities to schools can have an uplifting effect on entire communities, with economic and social benefits that were not part of the originally intended outcomes. As a result of SPLASH's participatory approach, nearly 10,000 household toilets were constructed without any project input. Another lesson is that addressing a taboo such as menstruation



in a comprehensive and sensitive way can turn the topic into a common and openly discussed concern for schools and families, with lasting benefit to school-going girls.

### *SPLASH Achievements*

- Overall: 346,539 people in target areas gained access to improved drinking water supply; 155,321 gained improved access to sanitation.
- All 3,059 latrines, 662 handwashing facilities, 313 washrooms for girls, etc. were constructed using local artisans with the District Education Board buildings officers and SPLASH engineers supervising and certifying the work.
- SPLASH built or rehabilitated 423 water points to meet ministry standards and installed 284 drinking water stations near classrooms in 312 schools.
- 1,320 teachers completed SPLASH in-service training in hygiene education.
- The majority of SPLASH schools have an O&M budget line, and almost all schools stock WASH consumables such as toilet tissue, soap, and pads.
- 100 percent of SPLASH-constructed toilets and handwashing facilities were operational in the last year of the project.
- 90 percent of schools in the target area achieved “WASH-Friendly” status.
- To strengthen the capacity of the local artisans and ensure that their work is of good quality and in accordance with the required construction standards, the project trained and certified 1,463 artisans, i.e., masons, plumbers, carpenters, painters, and technical supervisors in basic construction standards, including 190 area pump menders (APMs) (150 males and 40 females).



◀ The infrastructure overhaul at SPLASH schools included the provision of water points and clean drinking water stations. Studies show that access to safe drinking water reduces the likelihood of diarrhea by more than 20 percent and that well hydrated students concentrate better on lessons.

- SPLASH provided 80 APM toolkits to trained APMs and established 65 toolkit centers in the four districts, thus ensuring that all water points, even those that previously had no APMs to conduct maintenance and repair work, are covered.
- School WASH O&M Guidelines were distributed to all schools in the four districts.

## Household Air Pollution (HAP) Activities

### Bangladesh (May 2012 to April 2016)

As Phase 1 of a household air pollution activity, WASHplus conducted a comprehensive assessment to better understand consumer needs and preferences as they relate to increasing the uptake of improved cookstoves (ICS) in Bangladesh, including household trials of improved stoves. Five different ICS models were placed in 120 households for cooks to use and give feedback through semi-structured elicitation questions. WASHplus supported FHI 360 field staff who performed the baseline, three-day, and three-week surveys, as well as willingness-to-pay assessments. Semi-structured survey instruments were complemented by stove use monitoring using temperature-sensing data loggers placed on all stoves in the homes (both the improved stove provided for the trial and traditional stoves that remained) to track actual stove use.



*A woman cooks with one of the five improved cookstoves WASHplus used in its study exploring consumer preferences and willingness to pay in Bangladesh. The project's research informed a current study of improved cookstoves underway in Nepal.*

The study clearly showed that at least two stoves were perceived as preferable to traditional cookstoves by many of those who tried them. As is common among improved stove interventions, none as currently produced met all consumer needs, and none met sufficient consumer needs to completely replace traditional stoves, although consumers did report liking them, and all homes did use them. WASHplus shared consumer feedback with manufacturers of each of the study stoves, which were given the opportunity to make any appropriate modifications to the stoves; most did so, and the revised versions were more popular.

Under Phase 2, WASHplus, in collaboration with the Global Alliance for Clean Cookstoves, developed a marketing and behavior change strategy for Bangladesh, including evidence-based approaches to increase the uptake of stoves. This drew on lessons learned in Bangladesh and other countries in the South Asia region in behavior change, demand creation, and marketing of WASH products and cookstoves.

## Nepal (June 2015 to April 2016)

WASHplus is working to help inform clean cookstove promotion in Nepal, which launched an ambitious Clean Cooking Solutions for All by 2017 initiative to combat very high levels of household air pollution. Although the in-home trials were delayed due to the April and May 2015 earthquakes, which also resulted in a change in planned study districts, WASHplus officially launched its field work in June of five cookstove models—the Prakti LeoChimney, Greenway JumboStove, Alpha EcoChula, Xunda Field Dragon, and a current improved mud stove. The consumer research study included trials of improved practice, willingness to pay (WTP) assessments, controlled cooking tests (CCTs) with local cooks and technical experts from the Berkeley Air Monitoring Group, and kitchen performance tests. WASHplus relied on its previous experience in Bangladesh to refine survey tools and methods.

CCT and kitchen performance test results showed significant fuel savings over the traditional stove for all study stoves; the data were also submitted to the Global Alliance for Clean Cookstoves for use in its clean cooking catalog. 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). A second WTP methodology was used in Dang; households were given the stove as a gift for their participation in the study, but given the option to cash out at the same purchase rates if they would prefer cash instead of the stove. Of the 66 study households in Dang, eight chose the buy-back, and 58 chose to keep the stove. WASHplus will finalize and disseminate a cookstove consumer preference and WTP toolkit to help guide organizations, planners, and marketers with more effective programming that leads to adoption and consistent use. The toolkit is based on multi-methods research in Bangladesh and Nepal and includes methods, techniques and tools, and guidance on how to adapt and use them in a variety of settings.



◀ As part of its cookstove study in Nepal, WASHplus is conducting clean cookstove demonstrations in Tanahu and Kavre districts. The demonstrations include food preparation of Daal and rice, two local staples, and have attracted a lot of people eager to learn more.

## What is WASHplus?

The WASHplus project supports healthy households and communities by creating and delivering interventions that lead to improvements in water, sanitation, and hygiene (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.

This brief is made possible by the generous support of the American people through the United States Agency for International Development (USAID) Bureau for Global Health under terms of Cooperative Agreement No. AID-OAA-A-10-00040. The contents are the responsibility of FHI 360, and do not necessarily reflect the views of USAID or the United States Government.

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