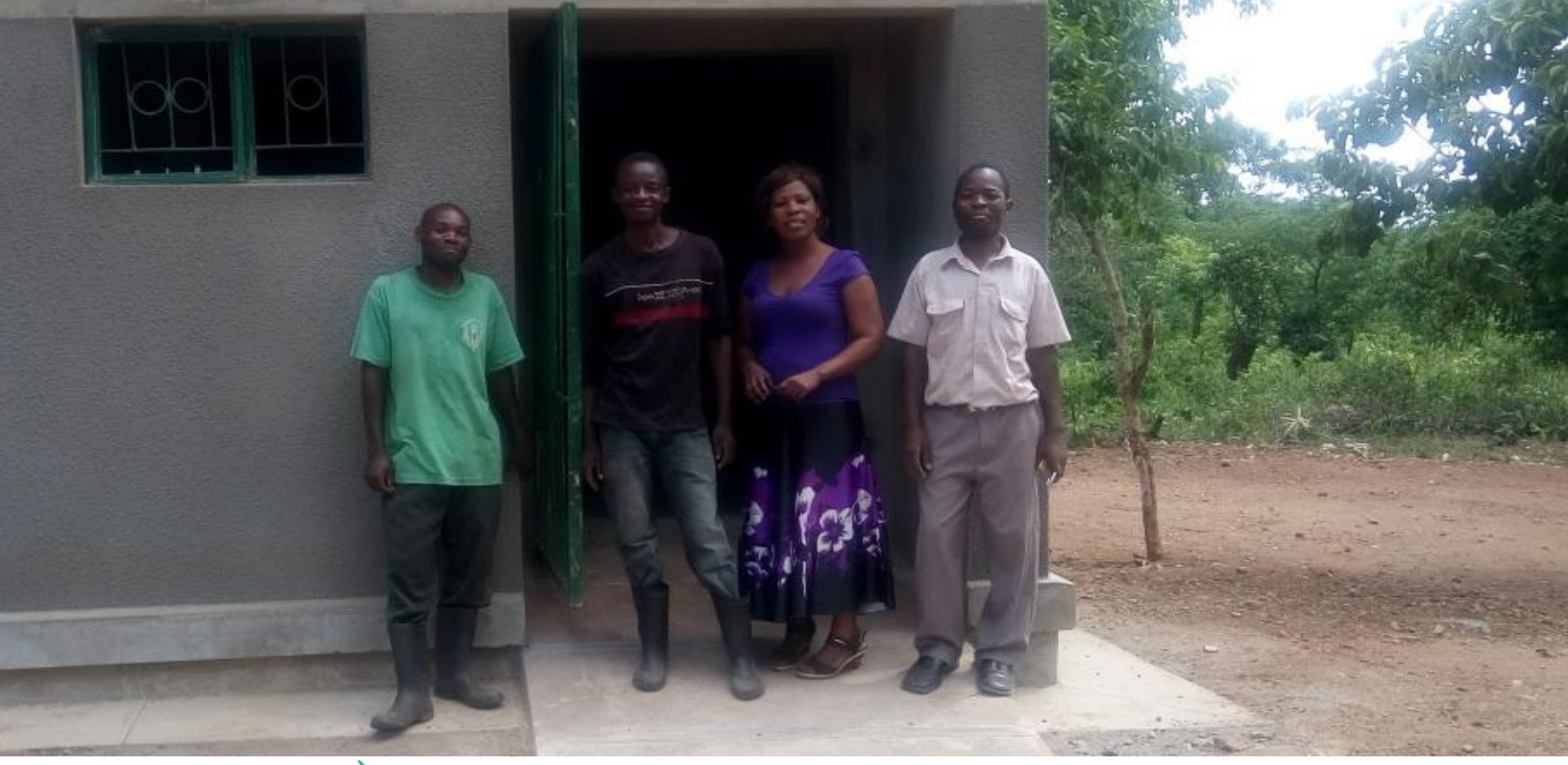

washplus

Supportive Environments for Healthy Communities

SPLASH Spillover Effect

UNEXPECTED CONSTRUCTION RESULTING FROM SPLASH PROJECT INTERVENTIONS

MARCH 2016

USAID
FROM THE AMERICAN PEOPLE

ABOUT 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.

RECOMMENDED CITATION

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ACRONYMS

DEBS	District Education Board Secretary
MGE	Ministry of General Education
PTA	Parent-Teacher Association
SPLASH	Schools Promoting Learning Achievement through Sanitation and Hygiene
SLTS	School-Led Total Sanitation
USAID	United States Agency for International Development
WASH	Water, Sanitation and Hygiene
WASHE	Water, Sanitation and Hygiene Education

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EXECUTIVE SUMMARY

This report highlights development and construction projects that were undertaken at schools and in communities following USAID/Zambia's Schools Promoting Learning Achievement through Sanitation and Hygiene (SPLASH) intervention in schools, but without project funding. We refer to these activities as SPLASH spillover development (mini) projects because they occurred in the SPLASH targeted schools and catchment areas, and those that engaged in implementing them self-reported that SPLASH directly or indirectly inspired their actions. These SPLASH-inspired development projects include a wide range of activities such as household latrine construction in the community and at teachers' houses and construction of classroom blocks, washrooms, and teachers' houses, all of which are linked to the SPLASH intervention in an anecdotal way, but entirely funded by communities and/or other partners. The report showcases the stories of six representative schools from three districts of Zambia's Eastern Province selected for having excellent construction examples.

This report shows how SPLASH's comprehensive approach to WASH (water, sanitation, and hygiene) in Schools—which links the education system, WASH facilities, and hygiene education improvement—and strong participation from the community through the PTA can influence development in areas outside of school WASH. By drawing on examples from the six highlighted schools, the report explores the plausibility of linkages of school WASH to development, and the entire interrelated picture of school-community linkages when the community understands the benefits of improving WASH within and beyond the schoolyard. The report records interviewees' stories of perceived links in the provision of school WASH to construction of additional WASH and non-WASH facilities such as classroom blocks, teachers' houses and toilets, and community latrine construction, as well as the interviewees' appreciation of the connection between WASH and girl-child education and teacher retention.

From a closer perspective, findings of this report point to the fact that for local communities, participatory approaches that are self-mobilizing and self-empowering enhance action and ownership, and can lead to spillover effects beyond immediate project objectives. The report further illustrates how provision of esthetically appealing and modern WASH infrastructure motivated local communities and policy makers to act to improve other infrastructure present at the school to match "standards" introduced by the SPLASH project.

INTRODUCTION

In 2011, USAID/Zambia invested $18 million in a four-year WASH in Schools program that covered half the districts of Eastern Province and provided enough resources to meet the sanitation facility, water points, and hygiene education needs of the school population of those districts. These numbered 200,000 students attending close to 500 primary schools. By 2012, SPLASH (Schools Promoting Learning Achievement through Sanitation and Hygiene) was up and running. WASHplus, the implementer, comprised of FHI 360 and CARE, conducted a Baseline WASH Facilities Assessment in all schools in the four districts and found the following conditions: 70 percent of schools had access to water, but the functionality of pumps was a big problem. Only 13 percent of schools treated their drinking water, and while 28 percent had some form of handwashing facility, virtually all were without soap and none was being used. By the end of 2015, SPLASH had surpassed its construction and training targets, with delivery of 3,000 school latrines, 120 new and 290 rehabilitated water points, 284 drinking water stations near classrooms, and 614 handwashing facilities.

School WASH occupies a space between—and reaching into—two sectors that do not always speak the same language. SPLASH was sponsored by USAID/Zambia's Education Office in an innovative and unique investment gesture for that sector. As such, SPLASH was expected to contribute significantly and demonstrably to the education sector's key objectives that address improving learning outcomes, in particular reading skills. In the WASH sector, the standard measures of success are increased access to improved sanitation, drinking water, and increased uptake of improved hygiene practices. In the case of SPLASH, indicators from both the WASH and the education sectors were measured for program implementation purposes and for USAID's reporting requirements.

SPLASH was housed within the education system, and its unexpected effect on surrounding communities came about through the opportunities afforded by its comprehensive implementation model, i.e., it went beyond infrastructure provision to include hygiene education and community involvement mostly through the Parent-Teacher Associations (PTA) and required in-kind contributions to construct facilities. SPLASH used the School-Led Total Sanitation (SLTS) approach to create WASH-Friendly schools. SLTS unites the school and the community at the outset of the program to assess sanitation and hygiene conditions in and around the schools, explains how open defecation affects students and their families, and galvanizes them to address the poor conditions with and without outside resources. SPLASH provided resources to the schools to improve poor sanitation and water access situations.

SPLASH had an ambitious set of construction targets and a brief four-year timeframe to achieve them. The SPLASH team worked through the Ministry of General Education (MGE) in collaboration with the District Education Board Secretary (DEBS), DEBS Buildings Officers and other MGE staff. All project energy and attention was focused on the schools and working with PTAs to get school-based construction, training, and institutionalization work done.

During its second year, SPLASH funded operations research to answer the question, can school children be effective agents of hygiene behavior change? This statement was assumed to be true, but no one had actually tested it. This research launched a shift of attention from the school to the children's households and communities. As the research progressed, project staff started hearing that numerous households had built tippy taps (simple handwashing devices made from locally available materials) after school children had come home with the new lessons on hand hygiene. Eventually stories drifted back to project management that some communities and households had even built household latrines after the SPLASH SLTS intervention.

During the final weeks of the project, the SPLASH team visited twenty schools in all four districts unannounced, accompanied by project and Government of Zambia staff assigned to that district. The purpose was to assess the degree of ownership and sustainability of the newly built facilities and to ascertain how well the hygiene education had been integrated into the school culture. What the team discovered surpassed all expectations.

The most important finding was that every school visited, without exception, had a system in place for operations, maintenance, and repair of facilities. Each school also had a supply of toilet tissue and menstrual pads on hand, and nearly every handwashing station had soap or ash available. Not one school was expecting the visit. School staff shared the same story over and over—the availability of water led to PTA construction initiatives that extended to the households or communities. The team heard about new health posts, classroom blocks, additional latrines, school kitchens, and more. The team also heard many tales of local artisans, engaged and trained by SPLASH, finding employment elsewhere because they had new marketable skills. Even the

THE SPILLOVER
(real and possible)

Estimated:

- **9,200 household latrines**

Counted:

- **20 teachers' houses**
- **8 classroom blocks representing 16 new classrooms**
- **9 school toilets representing 20 drop-holes**
- **A new school kitchen**
- **A health post**
- **Plastering, roofing, and repair work on school buildings**

local SPLASH staff on the team were surprised—they had not heard of these effects before.

These revelations and the desire to estimate cost share generated through project activities spurred SPLASH management to conduct a systematic census of all the construction carried out following SPLASH interventions, especially water supply and SLTS, without any financial or technical input from SPLASH. This review was conducted to get a sense of the possible contribution SPLASH made beyond its initial intended effects. SPLASH sent a consultant, Irene Mulaisho, to find and record the additional construction in SPLASH schools and catchment communities with a view to establish a reasonable level of cost share generated by the project. To estimate the number and cost of household latrines built after SPLASH conducted SLTS activities, the consultant worked closely with district SPLASH and MGE staff and with schools, PTAs, and WASH committees to document household latrines. SPLASH engineers provided costing help. The consultant followed up leads and found that SPLASH school activities resulted in much additional spillover construction (see box above). The count of the additional structures was systematic and thorough, however, the exercise has certain inherent limitations as it is not possible to attribute in a scientific way household latrine construction to SPLASH interventions, even though anecdotally it was a given. Attribution is much easier for the larger projects such as teachers' houses that were entirely dependent on the new access to water provided to schools through SPLASH.

Having documented "what" was constructed, SPLASH management decided to explore the "why" and "how" as the additional construction was entirely unexpected and unplanned. A former SPLASH staff member familiar with the terrain and the players, Romakala Banda, was engaged to identify a representative set of schools and communities, record their stories, and document their motivations and achievements in implementing mini-development projects post-SPLASH. This brief outlines the "why" and the "how" through stories, quotes, and photos.

In conclusion, the type of unintended effects discovered through SPLASH merit attention and potential inclusion in future WASH in School interventions to systematically capture what occurs in schools and communities with financial inputs from stakeholders following outside investments.

CHASAMWA PRIMARY SCHOOL

New Toilets Help with Teacher Retention

Esaya Manda stands by a new teacher latrine at Chasamwa Primary School.

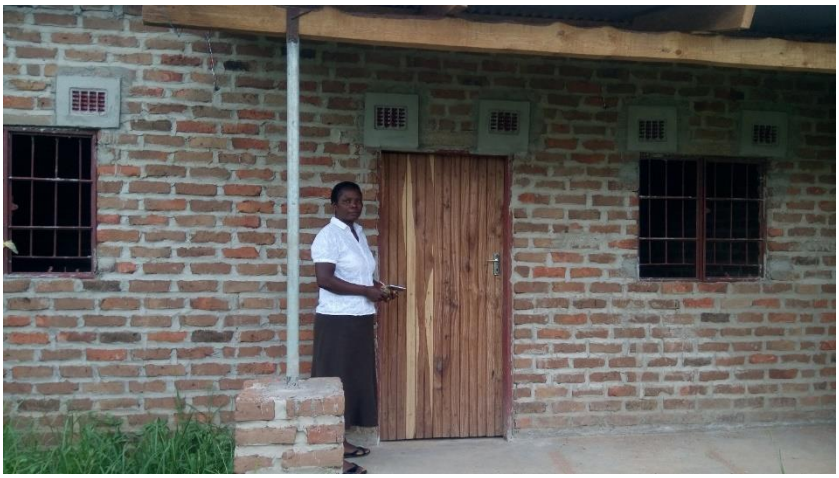
Chasamwa Primary School in Lundazi District has 736 pupils and seven teachers. After benefiting from water point rehabilitation and latrine construction, the school found it easy to mold bricks for other development projects. Inspired by the quality of the latrine infrastructure, the availability of water, and the SLTS approach, PTA members spearheaded efforts to construct two toilets at the two teachers' houses to match the well-built SPLASH school latrines. "Good latrines for teachers at the classes and at their homes motivate teachers to remain at the school. A teacher's family is made more comfortable by a good toilet,'' explains Mukandawire Mukire, senior teacher at the school.

Plans are underway to construct a girls' dormitory that will have a bathroom and toilet for the weekly boarders at the school. ''At the moment life is difficult for 35 girls who live within the school premises at an improvised boarding house,'' explained Esaya Manda, the WASH coordinator at the school.

Not only have the parents constructed latrines for the teachers, the surrounding community has also constructed household latrines so that pupils can practice good hygiene at their homes as well as at school. This ensures that pupils are protected from waterborne diseases related to poor sanitation. The Ponda-Ponda household of nine people built a latrine for their family after seeing the toilets constructed at the school (see box, page 12).

MCHEREKA PRIMARY SCHOOL

Water is the Key Driver for New Teacher Housing



Head Teacher Edith Tembo sees the newly constructed teachers' accommodations as a way to attract and retain staff.

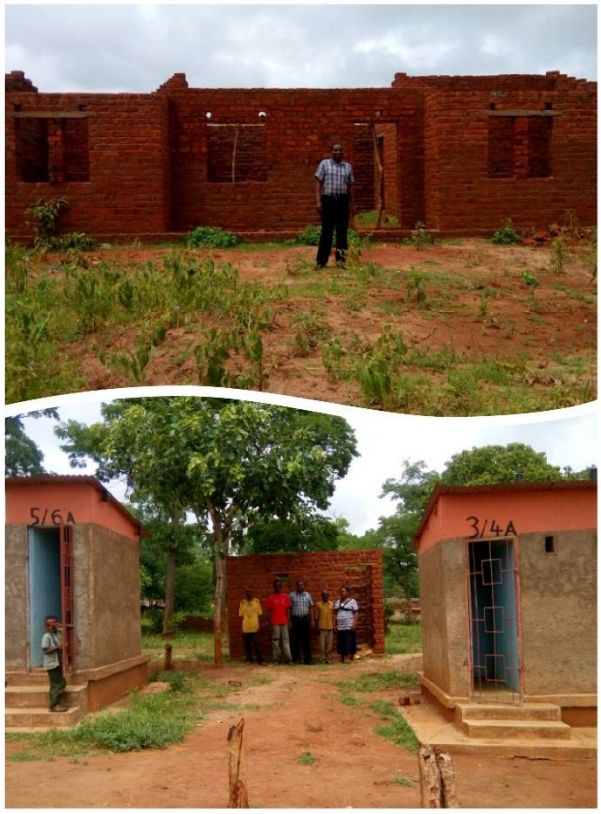
Also located in Lundazi District, Mchereka Primary School has 430 pupils and eight teachers. After SPLASH installed a borehole at the school, the PTA mobilized its members to mold bricks for various other development projects: among them, a block of flats to accommodate some of its teachers who currently live in dilapidated houses. The school's remote rural location means that few alternatives are available to house teachers off the school campus.

The school's head teacher Edith Tembo believes that better accommodation for her teachers will help attract and retain staff at the remote school. She explained that the most important resource to stimulate construction was access to water through the borehole drilled at the school.

Once water was available, it made sense to ask the community to mold bricks for the project. ''We had planned to construct houses, but we could not do so until 2013 when SPLASH provided us with a reliable source of water that was close to the school,'' Ms. Tembo says. Parents in the surrounding community are asked to make an annual contribution of 5 kg of maize per pupil; this translated into more than a hundred 50 kg bags in 2013, which were sold to raise funds. Additional funds (ZMK 10,000) come from an annual fee charged to the local telecommunication company that has a tower within the school boundaries. The head teacher recounted that due to the labor contribution by the community and the goodwill of the bricklayers—mostly local artisans who also worked on the SPLASH latrines—the cost of constructing the teacher block was significantly reduced.

CHIGUMUKIRE COMMUNITY SCHOOL

SPLASH Raises Awareness and Community Responds with Girl-Friendly Washroom



Chigumukire Community School is able to build teacher housing on the school grounds (above) and a girl-friendly washroom (below) thanks to the availability of water and raised awareness.

Two villages consisting of 127 households feed into Chigumukire Community School, a remote school with a growing enrollment of 132 pupils and two teachers. According to Dominic Banda, an area Induna or traditional leader, the SPLASH-installed borehole marked the beginning of development for this community. "Within a short period, we were able to use the water from the borehole to mold bricks and start constructing two teachers' houses. Currently, the teachers live in the community and away from the school; this affects the running of the school,'' the Induna explains.

In addition to the teachers' houses, the PTA has constructed a washroom for girls. ''After receiving education about how poor menstrual hygiene management can affect a girl's education, we sat down as a community and decided to construct a washroom for our girls," the Induna adds. Due to the small catchment population, the PTA experienced challenges raising funds needed for the two projects. The community exchanged labor for construction service: villagers pulled together and worked in the field of the person who constructed the washroom. The motivation to build teacher housing and a washroom according to Malekano Tembo, a PTA Works Committee chairperson, comes from the hygiene education that the community received from SPLASH, which raised the community's awareness of the unique challenges faced by girls at puberty. The community plans to complete these two projects before the end of 2016 with the proceeds from the sale of their harvest.

Nothing Shall Stand in the Way

"After attending hygiene education meetings with the SPLASH project, I was particularly transformed by the discussion about how young girls are affected by poor management of menstruation at school and at home. So we organized ourselves as a community (127 households) to raise materials to construct a girls' washroom for our local school. We will not, I will not sit and watch the girls drop out of school if I can do something about the situation."

—Dominic Banda, Induna (chief's advisor)

KABILA COMMUNITY SCHOOL

Water Builds a School and Enrollment Jumps

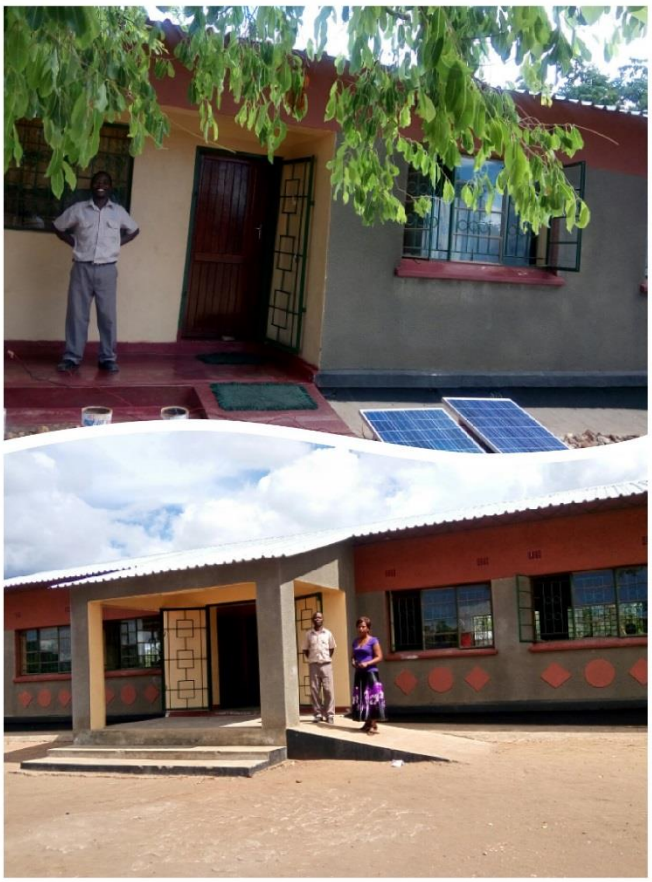
Kabila Community School presents a unique case of advocacy for WASH on the part of the community/school PTA. The school had no classroom, no trained government teacher, and used a church building to run classes from grades 1 to 3. Florence Chabinga, head teacher for the school, explained that in spite of receiving government and community support for the construction of a classroom block and two teachers' houses, the school could not undertake the construction because the nearest source of water, the seasonal Lupande stream, is about 7 km away. The problem of water access also meant the school could not grow its enrollment and staffing.

After SPLASH designated a borehole for the school, the DEBS saw to it that the school received funds for a classroom block and teachers' houses. ''Why didn't this happen before?'' Ms. Chabinga asks. "Because the Ministry of General Education hardly has funds for water, so we needed assistance, partners' help, to get the much needed water in order to grow this school. In 2012, enrollment was 36 pupils, but after SPLASH installed a borehole and toilets, enrollment rose to 160 in 2013 and to 201 in 2015. I accepted a transfer to this school as the first trained teacher in 2012 because water was available and to help run the projects. Now I do not want to be transferred. I have a good standard house and a trained deputy head teacher now,'' Ms. Chabinga explains.

''You cannot imagine the hardships that teachers faced when they had to fetch water from a stream far from the school. It meant the pupils had to ferry water three times a week. These children in grades 1 to 3 had to do a fair share of that work when the parents were busy with farming activities. That affected not only enrollment levels but also school attendance. All we had here were children with potential, and a people that had dreams and hopes, but all dreams would wither away without water to sustain them," Ms. Chabinga says.

''This school was a bush school, but as soon as a borehole was drilled by SPLASH, everything changed," says Moses Banda, the WASH Committee chairperson. "The community immediately molded over 350,000 bricks so that other projects could take off. As a result, DEBS ensured that government allocated money to the school to match the good gesture by USAID and the commitment that partners and the community had displayed."

In light of the hygiene education that accompanied the SPLASH infrastructure improvements, especially around menstrual hygiene, the WASH Committee chairperson noted the development picture at this school was incomplete without a washroom for the girls. And so the school wrote to the DEBS to request that part of the money allocated for school infrastructure be used to construct a girl's washroom. The Provincial Education Officer through the DEBS authorized the redirection of part of the funds, and the washroom was constructed. It seems clear that for this community, presence of water and modern toilets was motivation to advocate for more school infrastructure. This resonated well with local policy makers who also had the will to improve the classrooms to match the quality construction of the toilets and to address the overlooked issue of menstrual hygiene management.



A SPLASH water point, government resources, and community advocacy built a new classroom block (shown above) and washroom for girls at Kabila Community School.

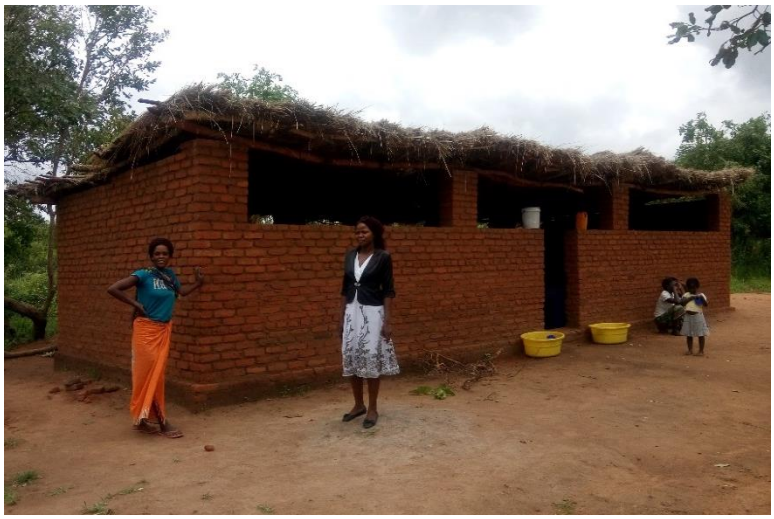
The school has completed the two teachers' houses, a classroom block, and the washroom within a remarkably short period of one year. The

head teacher attributes this to the hard work and commitment of the community members and transparency from management and school committees.

MKANDA MATEYO COMMUNITY SCHOOL

School Enjoys a Facelift, a New Kitchen, and More Hours Spent on Teaching

"Having access to water was a boost to development projects at the school,'' Mkanda Mateyo Head Teacher Patrick Phiri said. He pointed out that although the community was committed to constructing a classroom block, it was taking very long to complete because the shallow wells where the community drew water for construction and brick molding dried up just as the community was finished with farming activities and soon after the rainy season when brick molding is possible. After SPLASH provided a borehole the community molded bricks within just one season and completed the classroom block, which is now fully plastered and waiting to be floored.



Mkanda Mateyo Primary School has a new school kitchen made possible from the community contribution of molded bricks.

According to one community member, who also cooks for the children at the school, not only did the water facilitate completing a classroom block but also allowed the school to construct a kitchen. Using its own funds and labor, the school PTA has constructed a kitchen to house a school feeding program that is supported by another partner called Mary's Meals, which provides food for pupils.

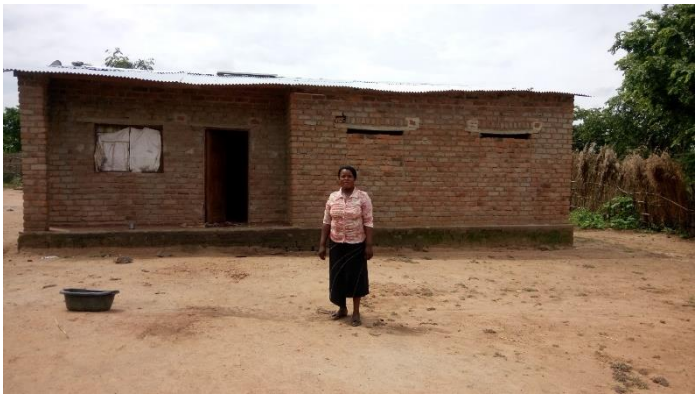
''What is life like now?'' Mailes Mbewe Longwe, the deputy head teacher asks. ''More hours are spent on teaching. Two trained teachers like myself have now agreed to stay at this much improved school. Pupils are learning better, and attendance has increased because the pupils don't have to draw water, and they like to eat a meal at school. The combination of these factors has led to higher enrollment, from just over 100 pupils in 2012 to 475 in 2015.''

The head teacher attested to the fact that new and nice looking toilets lifted the face of the school, and the uncompleted classroom block had been a "speck in the eye" that now has been resolved.

CHIAMBI PRIMARY SCHOOL

Children Now Have Time to Jump Rope

''My greatest joy as a mother is to see the children happy and jumping rope after school instead of drawing water from a far off place,'' says Belita, a community member who takes turns preparing meals for the children at Chiambi Primary School. Thanks to SPLASH, the school has water within the school grounds. Before provision of the borehole, pupils spent a lot of time collecting water from about 7 km away. This affected school attendance and reduced time for extracurricular activities.



Teacher housing, like this one at Chiyambi Primary School, is one example of the spillover effect seen at SPLASH schools where boreholes and quality toilets have been provided.

In addition, the school's head teacher and deputy head teacher both had to rent houses in a community away from the school. That fact, the head teacher believes, negatively affected the running of the school and the comfort of the teachers' families. Thanks to SPLASH the school received a new water point in 2012. This enabled the local community to construct two teachers' houses so now both the head teacher and her deputy live within the school compound. Plans are under way to start construction of a third house to attract another teacher to the school.

CONCLUSION

According to the various stakeholders, the educational aspects of the SPLASH program that targeted communities and schools motivated them and opened a way to recognize and react to challenges associated with poor hygiene and sanitation. For example, challenges faced by girls in managing menstruation at school led the community to initiate washroom construction. Elsewhere, the program inspired construction of toilets at teachers' houses, which contributed to teacher retention. WASH in Schools, and particularly the provision of water, resulted in projects ranging from construction of classroom blocks to construction of teachers' houses that leveraged funding from government and PTAs. It follows that access to water is the key driver for the spillover effect when it is coupled with a participatory process such as SLTS and hygiene education activities. These participatory processes provided a self-empowering, self-mobilizing, supportive environment for communities to pull together for action. The sheer presence of well-built, modern toilets acted as motivation for most communities to upgrade other school infrastructure to match the WASH infrastructure.

To summarize the learnings from taking a deeper look at the unexpected effects of a comprehensive school WASH program:

- Launching a school WASH program with a participatory process such as SLTS sets the stage for community empowerment, a sense of ownership of the WASH facilities, and responsibility for the well-being of pupils and teachers.

- Bringing a reliable source of water

School Latrines Inspire Construction at Home

Dalitso Hara is 16 years old and lives in Ponda-Ponda village with his parents. Dalitso is also a member of Chasamwa Primary School's WASH Club. Like many other families, he and his mother participated in SPLASH-sponsored hygiene education meetings and trainings. Dalitso loves the toilets that SPLASH has constructed at his school. Most importantly, he is aware of the dangers of open defecation and the importance of safe disposal of feces and teaches his friends about it. ''It is raining now and I don't want to imagine what happens to the feces that are left in the bush'' Dalitso says. Dalitso and his parents decided to construct latrines at the village, too. ''Toilets at school and no toilets at home will make you sick,'' he says.

to a school enables the PTA and other stakeholders to undertake additional construction using locally made bricks.

- Focusing on the problem of open defecation at and around school grounds through the use of SLTS coupled with school children coming home with hygiene lessons can lead households to build their own latrines with handwashing devices; or can lead to a mandate for household latrine construction from community leaders.

The message that emerges clearly is that school WASH can be a powerful springboard for household level WASH and community development. The challenge is that WASH in Schools and in communities or households usually falls to separate agencies or ministries. These will have to find a means for collaboration in order to benefit from the synergies and spillover effect.

We hope that this report will be useful to those designing WASH projects and to WASH project implementers as well as to colleagues in the education and WASH sectors. The report can also serve as an advocacy tool for increased funding for school WASH. Presented here is a revealing account of the impact of investing in school WASH that shines a light on returns on WASH investments. The goal is to inspire others to see the broad value of investing in WASH in Schools and to approach the effort with an intention of including the community in a meaningful way. As this document shows, results can go beyond our wildest dreams.