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WASHplus LEARNING BRIEF

CLTS-Plus: Value-Added Sanitation Programming

Many countries have made CLTS the centerpiece of their national sanitation strategy and track progress toward open defecation free (ODF) communities as well as individual household coverage of latrines. This Learning Brief describes the different components WASHplus uses when implementing CLTS activities and illustrates how and why they have been applied to CLTS in various country programs.

A community in Mali participates in a CLTS triggering session where WASHplus-trained facilitators walk participants through a series of exercises that lead to pledges to stop open defecation and build household latrines with handwashing stations.

DEFINITION

Community-led total sanitation (CLTS) is an innovative programmatic approach to rural sanitation that emerged in the early 21st century. Pioneered in Bangladesh in 1999, CLTS spread quickly throughout Asia and Africa and is now the predominant approach of both government and nongovernment development partners in an estimated 66[1] countries to increase adoption of fixed-point defecation in rural areas.

The CLTS Paradigm

Grounded in participatory rural appraisal techniques that engage communities in their own problem solving, CLTS harnesses the power of community decision making and social solidarity to influence individual behavior and achieve communitywide results. It is a facilitated process to inspire rural communities to collectively abandon the practice of open defecation and build latrines (or toilets) without reliance on external subsidies. Using participatory methods, community members analyze their traditional sanitation practices of defecating in the open and discuss publicly what happens to all that "shit" (the graphic

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WASHplus trains local sanitation entrepreneurs to market an expanded range of products and coordinates with local triggering efforts to ensure a smooth supply chain of necessary materials so householders get the sanitation options they desire. A catalog of safe, hygienic, and feasible improvements was developed to include different latrine designs appropriate for the geophysical characteristics of the southwestern coastal areas, including raised plinth and sand envelopment around the pit that confines feces and reduces pathogen transmission to the environment. The improvements are retrofitted into the traditional single and twin offset pit latrine design.

The catalog of sanitation options offered was circulated at tea stalls where men gather daily to talk, and used by vendors and outreach workers in households, shops, and communities.

Results: CLTS+ activities resulted in 285 ODF communities: 13,475 new household latrines, 14,653 upgrades to an improved latrine, and 41,114 handwashing stations. Many households moved from using an unhygienic toilet to a pit latrine with a water seal and improved superstructure.

language used in CLTS facilitation) in the environment. When facilitated effectively, CLTS community "triggering" events "ignite" a sense of shared disgust and shame within the community as members realize they quite literally are ingesting one another's feces so long as open defecation continues, degrading both health and dignity. This emotion often leads to the spontaneous decision by most households to build latrines, and engages community vigilance to take actions that shame violators, help laggards, and sustain initial improvements in latrines and sanitation practice. The do-it-yourself approach to latrine construction fosters local innovations and enables community-driven support mechanisms to emerge, which often result in communities becoming ODF within three to six months after being triggered.

As the approach evolved over time, its methodological rigidity has diminished, and practitioners have innovated and customized. As originally developed and disseminated by the Institute of Development Studies and key allies, particularly Plan International, the approach has prescribed steps and scope. Variations were welcomed, as long as they were not called CLTS. However, the core principles have remained relatively unchanged—focusing on strong facilitation, participatory and community-driven decision making, and the commitment to subsidy-free toilet construction. Implementers have introduced supplementary elements such as sanitation marketing, handwashing with soap, menstrual hygiene, equity and access, and emphasis on safely disposing of infant feces. Much has been learned and documented about CLTS.[2] While it has been effective in moving communities to become ODF, some key concerns are the quality of latrines and maintaining ODF status over time.

The WASHplus CLTS+ Approach

WASHplus, USAID's flagship global environmental health project (2010-2016), has applied CLTS in different ways in different countries. Recognizing the need to complement traditional CLTS triggering, WASHplus, along with other development partners, incorporated additional components under the rubric of a "plus." These elements depend on the country context, the geographic setting, the needs expressed by the countries themselves and parameters established by the funding USAID Mission. This Learning Brief describes the different CLTS+ components WASHplus uses and illustrates how and why they have been applied to CLTS in various country programs. WASHplus was not alone in expanding and innovating CLTS+ and worked with other partners on the ground, as well as myriad other practitioners innovating independently.

The project's approach focuses on improving access to and adoption of improved sanitation with the aim to move households up the sanitation ladder[3] sustainably. The "plus" (+) represents a focus that goes beyond the original CLTS interpretation that exclusively focuses on ending open defecation. For WASHplus, the "+" always explicitly emphasizes handwashing with soap after defecation and installing a fixed-point

handwashing device (often a tippy tap) outside the latrine to cue and assist correct and consistent handwashing practice. The "+" also often combines demand creation for sanitation with efforts to strengthen local availability of sanitation products and services, encouraging innovation with locally appropriate latrine designs using local materials to meet geophysical challenges and often involving small-scale materials suppliers and service providers.

WASHplus did not develop a set approach for CLTS+. Rather, the project identified areas that needed attention to promote sustainable access and use of sanitation services. Each WASHplus country CLTS+ effort emphasizes specific aspects of sanitation under the "+" umbrella. Because the focus of WASHplus was WASH-HIV integration in Kenya, WASHplus was already emphasizing equity and inclusion— ensuring that latrines are accessible to the elderly, the disabled, the weak (particularly those with HIV/AIDS), and pregnant women who may not be able to squat. This emphasis continued when the project began engaging in CLTS efforts. To promote uptake and sustained use of latrines in Mali, WASHplus developed low-cost latrine models appropriate to challenging environmental conditions and trained community-based masons to build robust latrines using local materials. In Bangladesh, where many households already practice fixed-point defecation, the project emphasized a feces-free environment through the safe handling and disposal of infant poo and facilitating improved latrine quality to minimize fecal waste discharge from latrines into the surrounding environment. CLTS+ in Uganda focused on handwashing after defecation, meeting the challenges of terrain, and offering alternatives to open defecation when farmers work in fields, far from the household latrine.

CLTS in Practice

+ Handwashing Stations Outside Latrines

Across countries, WASHplus designs a comprehensive package, rather than treating water, sanitation, and hygiene as stovepiped components. The project integrates hygiene promotion into all sanitation activities in all countries. Thus, though the traditional CLTS approach focuses primarily on stopping open defecation, WASHplus has always integrated hand hygiene and the construction of tippy taps as essential components of CLTS+. Behavioral theory supported by practical experience indicates that having a visual reminder to wash hands after using the latrine spurs improved and consistent practice.[4] In Uganda, WASHplus assisted the districts of Kisoro, Kabale, and Kanungu to implement a CLTS+ approach with a targeted handwashing component. Government workers were trained by WASHplus in CLTS that included a focus on handwashing, emphasizing handwashing stations next to latrines as part of ODF certification. Community Health Workers, known as Village Health Technicians or VHT, supported this by integrating handwashing stations into their regular household monitoring and promotional activities. VHTs mapped whether handwashing facilities were present and in use next to the latrine. They were trained to make tippy taps and support every latrine

A Ugandan family washes their hands outside their newly built latrine using a water-saving device called a tippy tap.

having a handwashing station nearby to promote consistent handwashing. Tippy taps were also encouraged near the cooking and eating area. Because water scarcity often influenced willingness to dedicate water to handwashing, construction of rain water catchment designs were incorporated into CLTS action plans. (Two designs were promoted: one fed directly into handwashing station reservoirs most often for school and institutional handwashing, the other included rooftop/cistern collection that increased overall household availability of water.) WASHplus created job aids, in addition to capacity-building materials, to support follow up, and also disseminated CLTS documents endorsed by the national Ministry of Health (MOH).

+ Sanitation Marketing

While CLTS creates the demand for latrines and other sanitation products and services, creating demand without adequate supply invites failure or limits uptake. WASHplus works to stimulate sanitation markets in the target areas as CLTS approaches are introduced. Experience from WASHplus activities in Kenya and Mali suggests that when supplies are available and in place before triggering happens, uptake is more likely and will accelerate adoption. For example in Kenya, triggering and increased awareness of the need for sanitation spurred households to build improved latrines at the outset. Some communities in the pilot sites requested and adopted even better improved latrines than were offered. In Mali, WASHplus found that when affordable sanitation upgrades were marketed as close to the triggering as possible and no more than one week later, momentum was not lost. Coordination with the small scale private sector might include training sanitation entrepreneurs, as WASHplus did in Bangladesh, Kenya, and Mali; explicit coordination with triggering; or promoting complementary products such as Aquatabs.

Sanitation marketing aims to create a sustainable sanitation industry. Employing marketing principles such as the "Four Ps Marketing Mix" helps improve products through innovation, determine consumer preference for

A WASHplus-trained Bangladeshi mason displays sanitation platforms and other concrete items cast to build improved latrines.

sanitation and loan products, and fulfill consumer aspirations more effectively. The four elements of marketing include:

Product is the supply or service available to the consumer. Products include loans and credit as financing is often key to improving latrines.

Place ensures that a supply chain exists so people can readily access the products and services they want.

Price refers to offering a range of products and services to meet different cost point requirements.

Promotion means communicating the information about the product to the potential user.

WASHplus supported a range of sanitation marketing activities in its country programs. In Mali, the project trained masons in latrine construction before CLTS commenced. In fact, the artisans attended the triggering events and offered their services to the newly interested households in triggered communities. This spurred uptake so successfully that the Government of Mali has advised that masons be trained before triggering happens. In Kenya, triggering and increasing awareness of the need for sanitation facilities through CLTS+ has spurred the uptake of improved sanitation at the outset. More than half the communities in the pilot sites requested and adopted improved rather than basic latrines. To encourage households to adopt an affordable improved latrine at the outset, WASHplus trained local artisans in improved latrine construction, such as digging circular pits that are more stable, laying bricks to stabilize the base and floor, and finishing with a smooth cast for easy cleaning. And many households chose to build an improved latrine from the outset. Currently masons have constructed 107 improved latrines compared with 83 basic latrines in these villages.

In Bangladesh, with its well-established supply chains and numerous local sanitation entrepreneurs, WASHplus supported comprehensive sanitation marketing activities. This included a range of latrine technologies to better manage the challenging water-soaked terrain, and also sanitation services to repair and upgrade latrines of poor quality, which were the majority. In collaboration with the Water and Sanitation Program of The World Bank, local entrepreneurs were trained in producing a menu of environmentally appropriate and financially accessible designs, in services to upgrade and repair, and skills to market latrines to bottom-of-the-pyramid consumers.

+ Innovations for Difficult Soil Conditions

Countries typically offer a one-size-fits-all type of latrine pit, which may function well in a particular geographic area with a specific soil type. But each country has many different geographies that require different solutions. WASHplus found that this was particularly true in Bangladesh, Kenya, Mali, and Uganda. In rocky areas of Uganda, outreach workers taught people to build shallow arborloo-type latrines and move the superstructure to a new site once they were full. In Kenya, WASHplus found that latrine pits were often too large and collapsed. Further, sanitation stakeholders focused on the platform

Different latrine and pit styles used for different soil types. Flood-prone/high water table area (Bangladesh), rocky soil (Mali), sandy soils (Mali).

SPOTLIGHT on Mali

WASHplus trained masons in each intervention village to build the type of latrines appropriate for the district and demonstrated that traditional latrines can be durable and hygienic when common home construction techniques are applied to toilet design. Joining CLTS triggering events, the masons were publicly recognized as having the skills to support households in latrine construction.

Results: Masons constructed over 6,000 latrines in eight months in areas long considered off limits for a subsidy-free approach. Different communities have improvised and innovated. In the plateau area, masons cut large sheets of rock into hygienic latrine slabs without using cement or other non-local building material. Further, following a national CLTS learning workshop, the Malian Government revised the national CLTS guide and training curriculum to include a section on building latrines in difficult soils based on WASHplus's model.

and superstructure but had not considered differentiating pit designs based on soil composition. In partnership with the MOH, WASHplus worked with the Water and Sanitation Program and PSI to develop a latrine pit counseling card that CLTS triggering personnel would use to guide communities in choosing the right pit for the particular soil type. This innovation aimed to reduce pit collapse and flooding in high water table areas that discouraged villagers from continuing to use the latrine.

In Mali, the national CLTS strategy suggested that implementers avoided difficult areas when selecting villages to apply the approach. Innovation around latrine hardware in Mali had previously been focused on introducing and disseminating the SanPlat, a reinforced concrete slab platform. SanPlat uptake proved sluggish in part because the technology does not address pit design. Recognizing this as the main challenge for effective CLTS in the intervention areas, WASHplus engaged regional stakeholders, MOH officials, local service providers, and masons, to identify appropriate innovations for building improved latrines on difficult soils (rocky, sandy, and flooded). This iterative process yielded model latrines suited to the district soil type, indigenous knowledge, and available construction materials. Each design was prototyped and tested for strength and durability.

+ Focus on Latrine Quality

Quality is a determinant of sustainability.[5] The literature indicates that increased quality of latrines and pits that prevent collapse are indicative of increased sustainability. Latrine quality is important for three reasons: first, quality latrines promote more consistent and sustained use because it's rewarding to use a nice and functional latrine. Second, it can attract a segment of new users that would like to be seen as modern, tapping into consumer aspirations that drive purchase and use for benefits that may be less tangible but more emotional. Finally, properly constructed latrines can protect the environment and prevent contamination from leakage, which is a desired outcome of fixed-point defecation.

Creating a feces-free environment requires innovation and collaboration with a range of technical and community partners from the private, government, and civil society sectors. In Kenya, WASHplus found that many households immediately constructed improved latrines when they were available and given the option, quickly climbing the sanitation ladder. This highlights the poor condition of current sanitation markets and the power of small improvements to those weak markets. In southwestern, coastal Bangladesh, communities practice fixed-point defecation in latrines of low quality, with cracked slabs and broken seals that leak out on the ground surface. WASHplus, working through local implementing partner WaterAid, focused on improving the quality of existing latrines using a Community Situation Analysis that follows the CLTS steps, engaging communities in collective analysis, problem solving, and actions. Examining their current situation, communities committed to ending unhygienic sanitation practices with do-it-yourself improvements such as raising the plinth level above the height of annual floods, diverting drain pipes into pits, or upgrading the squat platform and changing their behaviors to handle and dispose of children's feces safely.

+ Inclusive Sanitation

In 2011, more than 5.8 million Kenyans still defecated in the open.[6] To address the problem, the Government of Kenya adopted CLTS as a national policy to improve sanitation in rural areas. While Kenya had signed global commitments to achieve universal access to WASH services, implementing equity and inclusion were absent from the government's CLTS efforts until WASHplus introduced practical ways to do it. WASHplus used its small doable action approach to ensure that all household members had access to sanitation—this included installing guide ropes to the latrine for the blind, commodes made from local materials, and bed pans for the infirm. Once tested, the project shared the results with government partners who saw the value and incorporated these actions into the current CLTS guidelines and adapted WASHplus materials.

Above: Thanks to her daughter-in-law, a WASHplus-trained community health worker, Teresia's arm-string and bedside commode have increased her privacy and sense of independence.

Below: Visually impaired Danson Ndung'u uses a blue nylon string to guide him from his home to the toilet.

From 2010–2014, WASHplus worked with Kenya's MOH to generate household demand for sanitation and hygiene practices and introduce simple supportive technologies to vulnerable groups. Using funding from PEPFAR (President's Emergency Plan for AIDS Relief), the project supported the MOH and its partners to integrate improved WASH practices into HIV policies, programs, and training. In 2012, WASHplus integrated its approach into a child health platform that emphasized handwashing with soap and inclusive sanitation focused on the needs of the mobility-challenged, such as the elderly, physically challenged, chronically ill, pregnant women, and children—groups whose unique needs are often not adequately addressed in CLTS programs. Simple innovations, such as support bars, guiding ropes, and commodes made from plastic chairs for in-house use, made the world of difference for the mobility challenged.[7]

WASHplus trained MOH staff so that they could also train field practitioners to implement CLTS+ and inclusive interventions. The staff learned how to identify the needs of the mobility challenged and address them through affordable, locally appropriate, and effective modifications to standard practices. The MOH now incorporates WASHplus-developed tools and has a mandate to promote inclusive sanitation at scale into ongoing CLTS activities across the country. WASHplus assisted the MOH to develop inclusive sanitation indicators that were included in its national monitoring and evaluation reporting framework for rural sanitation.

+ Integration

The evidence base supports the relationship of ODF communities with improved child growth[8] and presence of a latrine with reduced diarrhea and improved quality of life for people living with HIV/AIDS (PLHIV). Under WASHplus, most country programs were developed with an integration component. This provided an entry point in many instances for introducing CLTS+. In Mali, for example, CLTS+ provided a foundation around which the integrated WASH and nutrition program was developed. In Burkina Faso, where WASHplus is developing a pioneering WASH and neglected tropical diseases program, CLTS+ is a key element of the integration strategy. Building off the WASH-HIV integration work in Kenya, WASHplus incorporated CLTS+ into a pilot area to examine its

Community members demonstrate knowledge of cooking hygienically using diverse foods and treated water at an ODF celebration in Mali.

integrated small doable action approach and to advance the Government of Kenya's ODF strategy.

In contrast, WASHplus Uganda complemented CLTS activities with inclusive WASH efforts carried out through HIV care and support activities in clinics and communities. Working through USAID HIV Care and Support partners and the VHTs mentioned above, WASHplus provided training on the inclusion issues elaborated above in the Kenya discussion. Like Kenya, in Uganda small doable actions were negotiated with PLHIV-affected households to improve safe feces management practices, as well as handwashing for the mobility-challenged such as those in late stages of HIV.

In other cases, such as Bangladesh, the need for improved sanitation in nutritionally challenged areas fostered intentional co-location of WASH and nutrition activities among USAID implementing partners. Co-location means that WASH activities were conducted in geographical areas that already had nutrition activities underway.

+ Managing Fecal Sludge

As with most CLTS programs, WASHplus has yet to address how to manage fecal waste adequately when latrines become full in its country CLTS+ programs. This is important to prevent people from reverting to open defecation. Although the rural communities where WASHplus intervened have adequate space to construct new pits once the first generation latrines are full, concrete steps on how to safely decommission a full latrine and the risks of handling fecal sludge needs to be tackled to adequately address sustainability. In Bangladesh, people intentionally separated ring liners to allow for seepage as a fecal sludge management strategy, or tolerated other leakage that had the effect of undesirable fecal sludge management (FSM). Leaky latrines last longer.

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

Though WASHplus did not engage in CLTS+ in Madagascar, the project did address FSM. To manage filled latrine pits, the traditional Malagasy practice consists of either rebuilding the latrine or hiring day laborers to manually remove the sludge and dispose of the waste in a river or rice field. WASHplus designed and piloted a private-sector service delivery model to sustainably

manage fecal sludge generated in the city of Ambositra using low-cost decentralized technologies. Working closely with the commune authorities, the project 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. The pilot project revealed that recovering costs are challenging for small businesses and subsidies may be indispensable to attract private operators to engage in safe desludging services. A satisfaction survey indicated that 80 percent of users are satisfied with the service and about two-thirds feel it is affordable, though many non-users claim that the service is too expensive. The same survey reported that the three most valued aspects of the service in order of importance are: cleanliness, service provider efficiency, and affordability.

MONITORING AND SUSTAINING CLTS+

WASHplus approaches CLTS+ as an ongoing process rather than a one-time community mobilization event. This requires CLTS implementers to embrace the timeframe as well as adequately budget for continued follow-up. Consistent with global best practice, the project emphasizes intensive follow up, technical support, and participatory tracking of progress toward achieving ODF status. The "+" components mentioned above have been designed to address shortcomings of CLTS described in the literature as well as the concern about slippage and sustainable use over time. While this time-bound project cannot measure the sustainable use of latrines over time, this is a critical undertaking that needs to be addressed.

In Mali, WASHplus supported district authorities to deploy a tiered monitoring system to galvanize communities to uphold their commitment to construct latrines post-triggering, offer practical advice on construction standards, and reinforce important messages such as the need to wash hands with soap after defecation and to construct a fixed-point handwashing station. Different teams (commune, district, and region) conduct field visits at regular intervals. Monitoring visits illustrate that the trained masons continue to innovate and adapt their products and services to their local context. Recognized as social change agents in their villages, most masons take great pride in their work and are dedicated to having their communities reach universal access to latrines. To date, communities have remained ODF after one to two years and households emphasize their commitment to continuing to use latrines that save time and offer privacy and safety.

In Kenya, WASHplus worked closely with the MOH to develop monitoring tools that would enable the counties to capture progress made in achieving ODF status. One bottleneck in particular was the limited availability of trained organizations able to provide third-party verification of ODF status. To that end, WASHplus trained organizations from around the country to provide third-party verification; this accelerated the government's ability to certify ODF villages. The government is monitoring communities and to date, communities reaching ODF status under WASHplus remain feces free.

THE HOUSEHOLD LATRINE: INFANT POO'S FINAL ADDRESS

Bangladesh is advancing programming guidance for the safe disposal of infant and child feces, an oft-neglected source of uncontained feces, and until recently, not part of the CLTS equation. In Bangladesh, only 22 percent of under 3 feces ends up in the latrine, only 11 percent into an improved latrine.

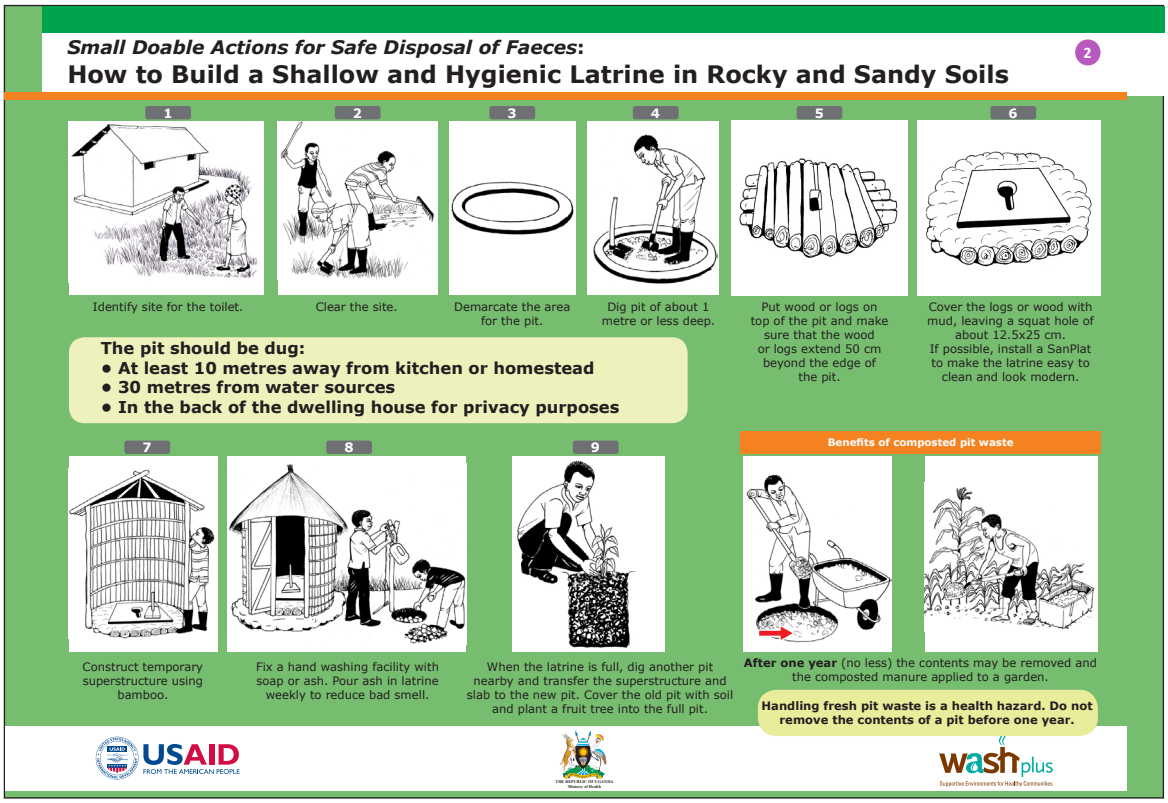
WASHplus worked with USAID implementing partners SHIKHA and SPRING to first identify relevant age cohorts, examine current defecation and cleaning practices, and finally to develop small doable actions for safe disposal of all infant and young child poo.

This new approach is now being integrated into CLTS+ follow up (as well as other intervention components). Different strategies for feces disposal are negotiated with householders, with the overall guidance that wherever the child may initially poo… whether using the potty, household trowel, or other means, to ensure that in the end, the latrine is poo's final address.

In Bangladesh, WASHplus, through implementing partner WaterAid, supports local government, and local partner NGOs support Community Development Forums (committees) to track and follow up household progress toward latrine and handwashing station installation or improvements. Local NGOs tracked progress using smartphones and relayed the information to various stakeholders. As described above, WASHplus supported local entrepreneurs to coordinate and meet community need for purchase, upgrade, or repair of household latrines. Government backlogs due to political strikes and extreme flooding also delayed verification and monitoring of ODF communities. The same extreme weather also damaged latrines. Several villages with improved latrine designs, such as raised plinths, reported far fewer latrines were destroyed in flooding and more communities were declared and certified ODF after conditions allowed teams to visit villages.

The short-term nature of WASHplus's engagement in these countries, however, did not allow for the project to conduct or finance long-term monitoring of sanitation behaviors to detect slippage back to open defecation practices, or progress up the sanitation ladder. In many contexts, under-resourced local governments struggle to continue monitoring ODF practices at the intensity that was possible using project resources. The continued presence of government-backed, community health workers in WASHplus communities offers a mechanism for governments to continue to track sanitation coverage.

This counseling card developed for WASHplus's Uganda activities provides step-by-step instructions for building latrines on rocky or sandy soils.



CONCLUSION

Latrine built into the rocky soil of Mali provides a private and sturdy place to defecate close to home.

As noted at the outset, CLTS is not a one-size-fits-all approach. Contextualizing the traditional CLTS model with complementary interventions is advantageous and in many contexts necessary. By their very nature, the "+" components of CLTS increase scale and coverage of ODF communities, and encourage unsubsidized or less subsidized attainment of ODF in hard-to-reach geographies or vulnerable populations. Implementers should consider follow-up activities according to the social dynamics and environmental conditions encountered in each community. Sanitation provision must be approached in a holistic manner, both through increasing demand brought about by CLTS triggering, but also through ensuring supply-side interventions that provide a range of attractive hardware options for households while engaging local service providers as part of the solution to ending open defecation for the good of all.

CLTS+ can foster opportunities for local innovations to emerge. The Kenya, Bangladesh, and Mali examples demonstrate the effectiveness of CLTS at stimulating local innovations in appropriate, affordable technologies. Further, small-scale experiences can be taken to scale when strong partnerships exist with government. In Kenya and Mali, the governments' endorsement and national adoption of WASHplus's approach to CLTS+ ensure these innovations will continue to be used long after the project has ended.

Current indicators do not capture all of this innovation and change. International standards and indicators do not currently capture improvements to existing latrines that were already classified as "improved," so they go uncounted. A new sanitation ladder, likely to be adopted by the WHO/UNICEF Joint Monitoring Program regarding the new Sustainable Development Goals still does not capture these improvements. As new indicators are discussed, this issues merits attention so that household efforts to improve sanitation conditions are more accurately reflected.

Projects cannot offer a one-size-fits-all solution to latrine installation. Programs need to ensure that minimum standards for improved latrines consider the physical characteristics of facilities appropriate for the conditions where the latrines are located. Flooded, rocky, and sandy soils require particular pit designs to be effective (environmentally sound) and acceptable to householders.

The WASHplus experience adds to the growing evidence base and best practice for achieving and sustaining ODF communities. The global community has harnessed proven, flexible CLTS+ approaches and is making strides in advancing sanitation options for an open defecation free world .

ENDNOTES

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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.

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