



JOURNEY TO DEVELOP AND SUSTAIN WASH FRIENDLY SCHOOLS

USAID UGANDA SANITATION FOR HEALTH ACTIVITY (USHA)

July 2023

OVERVIEW

This learning brief highlights the USAID Uganda Sanitation for Health Activity’s (USHA) journey to support 114 schools to become water, sanitation, and hygiene (WASH) Friendly (Table 1). It describes the steps, achievements, and key takeaways from the 20 districts USHA supported.

BACKGROUND

Children spend a significant portion of their day at school, where poor WASH services can impact educational outcomes and increase potential disease transmission. A 2019 National WASH in Schools baseline mapping report commissioned by the Ugandan Ministry of Education and Sports (MoES) found that only 58 percent of primary schools (PS) in the country had on-premises access to water; 22 percent met the pupil to national stance standard ratio of 40:1; 56 percent had handwashing facilities; 45 percent had School Health Clubs (SHC); and 42 percent had a Menstrual Hygiene Management (MHM) system in place. In 2019, USHA conducted a WASH baseline assessment in 114 government-aided PS across 20 districts¹ which found that only two schools were WASH friendly, i.e., had the proper infrastructure and behaviors in place to promote and facilitate in-school access to water, sanitation, and hygiene services (Table 1). With this information, USHA utilized a phased approach to develop and sustain WASH friendliness at these 114 PSs.

ACTIVITY’S WASH INTERVENTIONS IN SCHOOLS

USHA, in collaboration with stakeholders at the District Local Government (DLG), sub-country, and school levels, followed a stepwise process to support the selected schools’ achievement of WASH friendliness (Figure 1). USHA trained these stakeholders in its WASH friendliness approach and collaborated with officials at all three levels to conduct pre-intervention baselines assessing each school across eight WASH friendly parameters (Table 1). This enabled the Activity to tailor interventions for each school’s unique needs. DLG, sub-country, and school stakeholders participated in entry meetings to cultivate buy-in and collaborated on participatory capacity assessments of school-level structures (i.e., School Management Committees) available to support the development of a WASH friendly school environment. At the culmination of this phase of engagement, Memoranda of Understanding (MoUs) or commitment letters were signed by USHA, districts, and schools before infrastructure was built. These agreements reflected a commitment to the consistent use, proper management, and ongoing maintenance of WASH facilities provided under the project.

Uganda Sanitation for Health Activity (USHA)

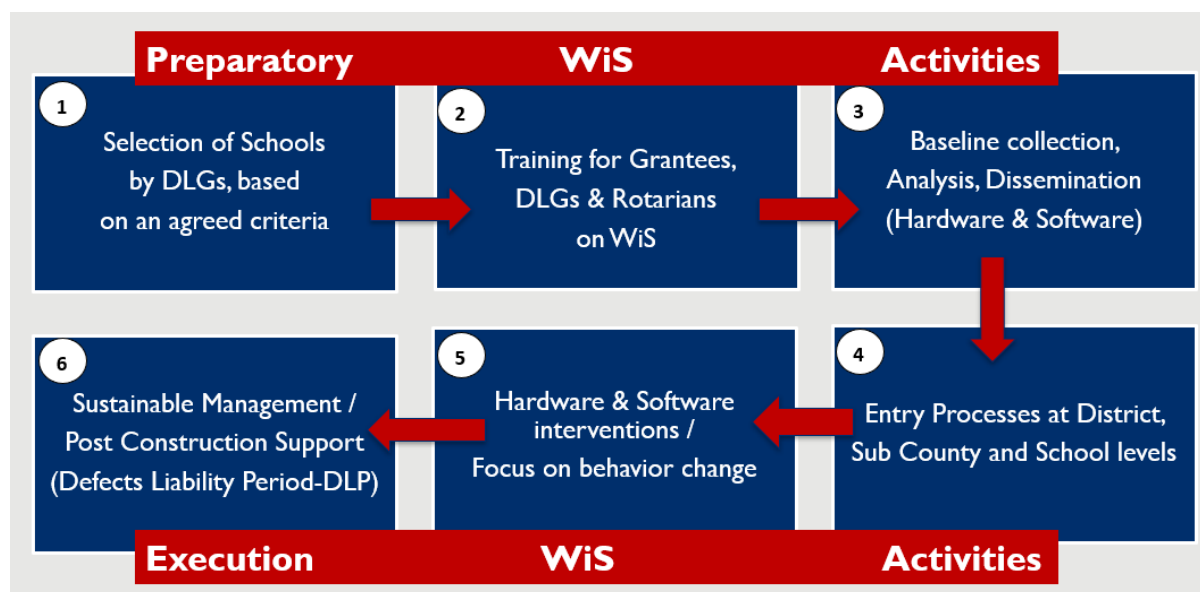
USHA was a 66-month program (29 Jan’18 – 28 Jul’23) financed by the United States Agency for International Development (USAID). USHA was implemented by Tetra Tech along with partners FSG, Sanitation Solutions Group, SNV USA, and BRAC.

USHA worked in 20 districts across three regions in Uganda, implementing a series of water, sanitation, and hygiene (WASH) interventions to achieve the following key outputs:

- Increased household access to sanitation and water services.
- Key hygiene behaviors at home, school, and health facilities adopted and expanded.
- Strengthened district water and sanitation governance for sustainable services.

¹ Buikwe, Bukomansimbi, Buyende, Gomba, Jinja, Kaliro, Kayunga, Kyotera, Luuka, Lwengo, Mpigi, Namutumba, Sembabule, Gulu, Omoro, Nwoya, Agago, Pader, Kitgum and Lamwo.

Figure 1: USHA’s Approach to Developing WASH Friendly Schools



Following the baseline assessments and execution of MoUs, USHA implemented a series of governance, service delivery, and SBC interventions targeting, DLG staff, school management committees (SMCs), teachers, parents, and pupils. These software interventions were complemented by hardware interventions, including construction of incinerators, group handwashing stations, water points (boreholes or network connections), and five-stance latrine facilities with separate changing rooms and access to water for girls to ensure an MHM-friendly environment.

Based on the hardware needs identified in the baselines, USHA constructed a total of 87 five-stance drainable latrine blocks (455 stances) with hand washing facilities (HWF). These included 72 girls’ and 15 boys’ toilet blocks. In addition, 116 incinerators and 100 group handwashing stations were constructed. Through a partnership with Rotary International (RI), 55 boreholes with handpumps and 50 (10,000 liter) rainwater tanks were constructed at schools in need of water supply.



On the left, a group handwashing facility. On the right, an incinerator attached to girls’ toilet (Ikonia Primary School, Luuka district, Uganda)

To ensure proper operations and maintenance (O&M) of these facilities, USHA developed a supplement to the national MoES WASH O&M guidelines (*Handbook for Operation and Maintenance of*

Water, Sanitation and Hygiene Facilities in Schools in Uganda) focused on school WASH and delivered related trainings on its contents to DLG officials and school staff. The training included exercises on forecasting costs for school WASH services, daily maintenance of facilities, and FSM cost and demand planning.

In the realm of software, Social Behavior Change (SBC) activities promoted and reinforced positive WASH behaviors. Nudges were painted on toilet walls and on group handwashing facilities to remind students to practice handwashing with soap, use toilets and dispose of used MHM products correctly. USHA also trained teachers from each school to leverage SBC messages revolving around a cartoon character called ‘Soapy’ through a variety of materials and tools, including calendars, board games, posters, jingles, and badges. The promoted behaviors included proper and consistent toilet use, group hand washing with soap before meals and after toilet use, proper MHM practices, and management and hygienic maintenance of toilet facilities.

USHA also supported the establishment or revitalization of School Health Clubs (SHC)s and sector day celebrations; trained teachers and pupils on making reusable menstrual pads, using incinerators to support proper MHM; and making liquid soap to support hand washing with soap in schools. All trained schools received a starter O&M cleaning kit that comprises various supplies, such as color-coded buckets, personal protective wear, and cleaning brushes.



Nudges painted onto toilet curtain walls to prompt students to wash their hands after using the toilet (St. Damiano Primary School, Mpigi district, Uganda).

After handover of the WASH facilities, USHA continued to engage with communities and other relevant stakeholders to strengthen ownership and adherence to the O&M protocols. This stepwise process of engaging key stakeholders at the district, sub-county, and school level to achieve WASH friendliness in schools is captured in USHA’s WASH in Schools toolkit available to external implementers.

In total, USHA invested \$1.37m in sanitation and hygiene facilities supplemented by an additional \$475,000 under the RI-USAID partnership with USHA. This investment, complimented by the project’s education initiatives, benefitted a total of 74,938 learners (38,456 girls and 36,482 boys).

RESULTS OF WASH FRIENDLINESS ASSESSMENTS

In April 2022 and 2023, USHA conducted midterm and endline assessments using a mixed methods approach consisting of both interviews and on-site observations to measure the WASH Friendly progress of the 114 project-supported schools. Per USHA’s approach, WASH Friendly schools were defined by eight parameters (Table 1). Four of these parameters relate to water and sanitation infrastructure, or hardware, in schools. The remaining four are behavioral, or software, related. Additionally, four levels of scoring were designed to account for a spectrum of WASH Friendliness (Table 2). Each parameter contributes one (01) point to the total score and a school is categorized as WASH friendly when it scores 8 points. Scores 5 to 7 indicate that a school has an intermediate level

of WASH friendliness, 1 to 4 indicates a minimal level of WASH friendliness and zero score indicates that a school is not WASH friendly.

Table 1: WASH Friendly Index and Sub-indicators

WASH-Friendly Parameters	Score / Points for attainment	Sub-indicators
Dedicated WASH attendant or coalition at each school for regular operation and maintenance of facilities	1	a) School has someone responsible for O&M of WASH facilities b) School workplan with WASH activities integrated c) School WASH Improvement Plans (SWIPs) d) School O&M plan
Adequate menstrual hygiene management (MHM) facilities for girls	1	a) Presence of a Menstrual Hygiene Management room b) Presence of covered bins for disposal of menstrual hygiene materials in the girls' toilet c) Presence of an incinerator for disposal and management of used menstrual products d) Presence of a trained Senior Woman Teacher to support MHM
Active School Health Clubs (SHC)	1	a) A functional school health club (SHC) in place b) A trained SHC patron in place
Use of WASH education materials	1	Pupils have access to WASH education materials
Institutionalized WASH behaviors	1	Nine behaviors include: (1) toilet/latrine cleaning; (2) hygiene education programs; (3) regular dental checks; (4) hand washing with soap; (5) bathroom breaks for each class; (6) group hand washing before lunch; (7) compound cleaning; (8) classroom cleaning; and (9) health parades.
At least one functional, gender segregated toilet for boys and girls	1	Presence of functional gender segregated toilet blocks for boys and girls.
Access to basic drinking water source	1	School has access to an improved water source within 500m of the school premises.
Hand washing facilities with water and soap	1	Presence of functional handwashing facility with water and soap accessible/available to all pupils on the day of the assessment

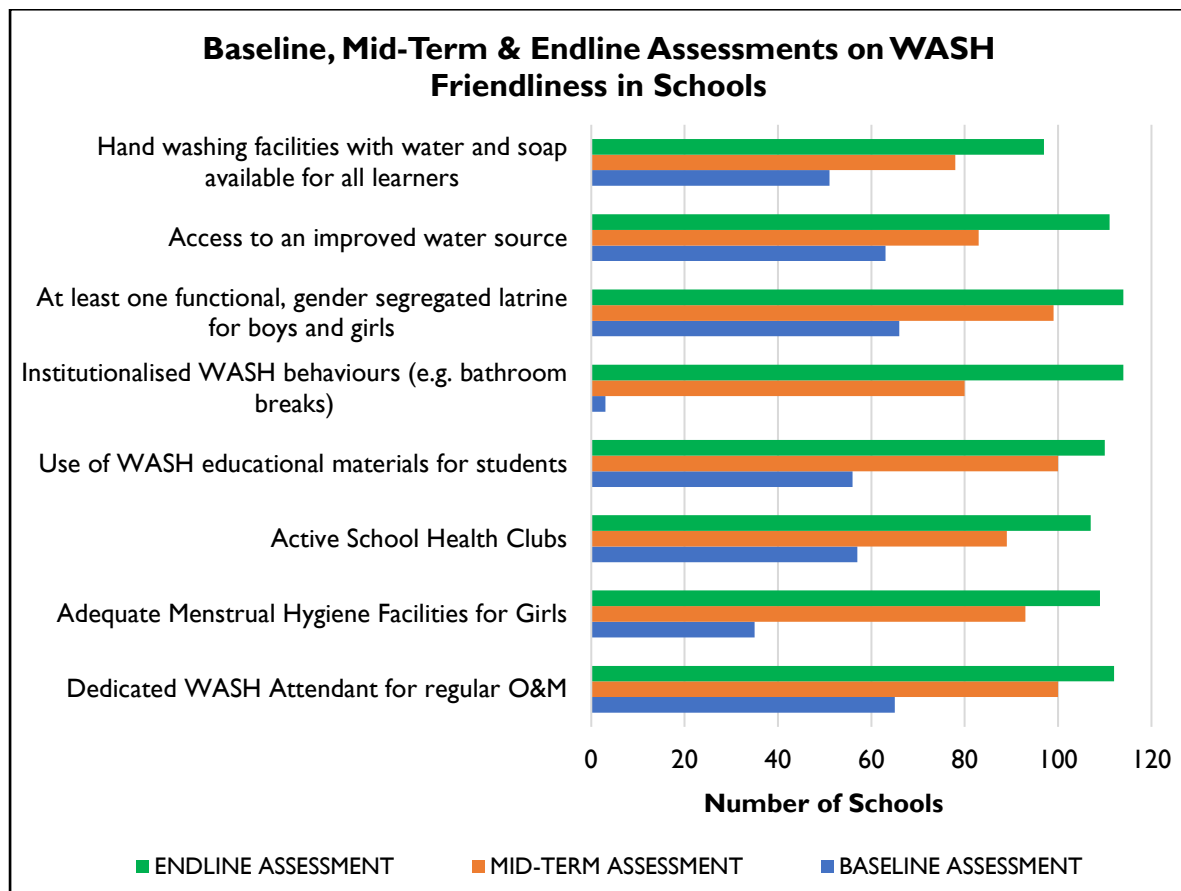
Table 2: WASH Friendly Index/Spectrum and Results Summary from the Endline Assessment at 114 Activity Supported Schools

Levels of WASH Friendliness	Maximum Score / Points	Results from the Endline Assessment (Out of 114 Schools)
WASH Friendly School (Three Star)	8	90 Schools
Intermediate Level of WASH Friendliness	5 to 7	23 Schools
Minimal Level of WASH Friendliness	1 to 4	1 School
No WASH Friendliness	0	0 Schools

At endline, ninety of the 114 PS were determined to be WASH Friendly. Figure 2 shows the scores from the WASH Friendly Schools assessment analysis in the 114 schools at three stages - baseline, midterm and endline. Schools scored differently across the eight parameters though all 114 scored

eight points on two parameters: institutionalized WASH behaviors and at least one functional, gender segregated latrine.

Figure 2: Scores from WASH Friendly School Assessment in 114 Schools



Dedicated WASH Attendant. 112 of the 114 schools scored eight points each on this parameter and had one or more dedicated WASH Attendant(s) or Sanitation Teacher(s). The WASH attendant serves as a school’s WASH Champion, ensuring the adoption of positive WASH behaviors and providing technical support to SHCs.

Adequate MHM facilities for girls. 109 of the 114 schools demonstrated adequate MHM facilities for girls per the parameter detailed in Table 1. In addition to hardware investments of toilet blocks, washrooms and incinerators for girls, USHA facilitated MHM awareness for SMCs, teachers, parents, and pupils. By the end of the Activity, 72 schools gained new washrooms, 110 schools had water & soap available in washrooms, and 90 schools installed covered bins and incinerators for the disposal of used menstrual pads. Additionally, all the schools had senior women teachers to guide girls on proper MHM.

Active School Health Clubs. 107 of the 114 schools had active School Health Clubs, with 4,749 student members (2,808 Girls; 1,941 Boys). SHC members sensitize fellow learners to good health practices, provide peer-to-peer support, and report health-related issues to a SHC Patron. They also help link schools to their communities through WASH outreach activities. Seven schools did not have active SHCs at the time of the endline and 93 active SHCs did not have work plans which help guide SHC activities year-to-year.

Use of WASH educational materials for students. 110 of the 114 schools reported that the “Soapy” SBC messages and materials USHA disseminated were successfully used. Pupils were also

found to know and practice the three key hygiene behaviors promoted by USHA, including through Soapy. Four schools did not have their SBC messages visible to learners on the school compounds and their learners lack access to printed WASH educational materials at school at the time of assessment.

Institutionalized WASH behaviors: All 114 schools showed WASH behaviors were institutionalized, demonstrating the regular practice of three key behaviors out of the nine total assessed indicated in Table 1. These included toilet/latrine cleaning, handwashing with water and soap, and group hand washing before lunch. All schools instituted routine regular bathroom breaks for each class and group hand washing with water and soap before lunch. Schools also held regular health parades.

At least one functional gender-segregated toilet for boys and girls. All 114 schools had separate latrines for boys and girls, increasing from 932 stances at baseline to 1,268 stances at endline. 46 of these schools reporting their latrines with surrounding communities. It was found that while this community use expanded latrine access beyond the school, it also led to increased O+M costs (in the observed instances of community use, doors needed replacement).

Access to an improved water source. 111 of the 114 schools had access to an improved water source. 88 of the schools had water on-site. Despite construction and installation of water supply systems by Rotary International, challenges persist for some schools in water stressed areas including sharing facilities with communities by 69 schools. While this led to increased access to water, it also was found to put additional pressure on O+M. Three schools in the North reported there was no access to water. This impacted the ability to institutionalize behaviors including hand washing with water and soap and regular cleaning of toilets/latrines.

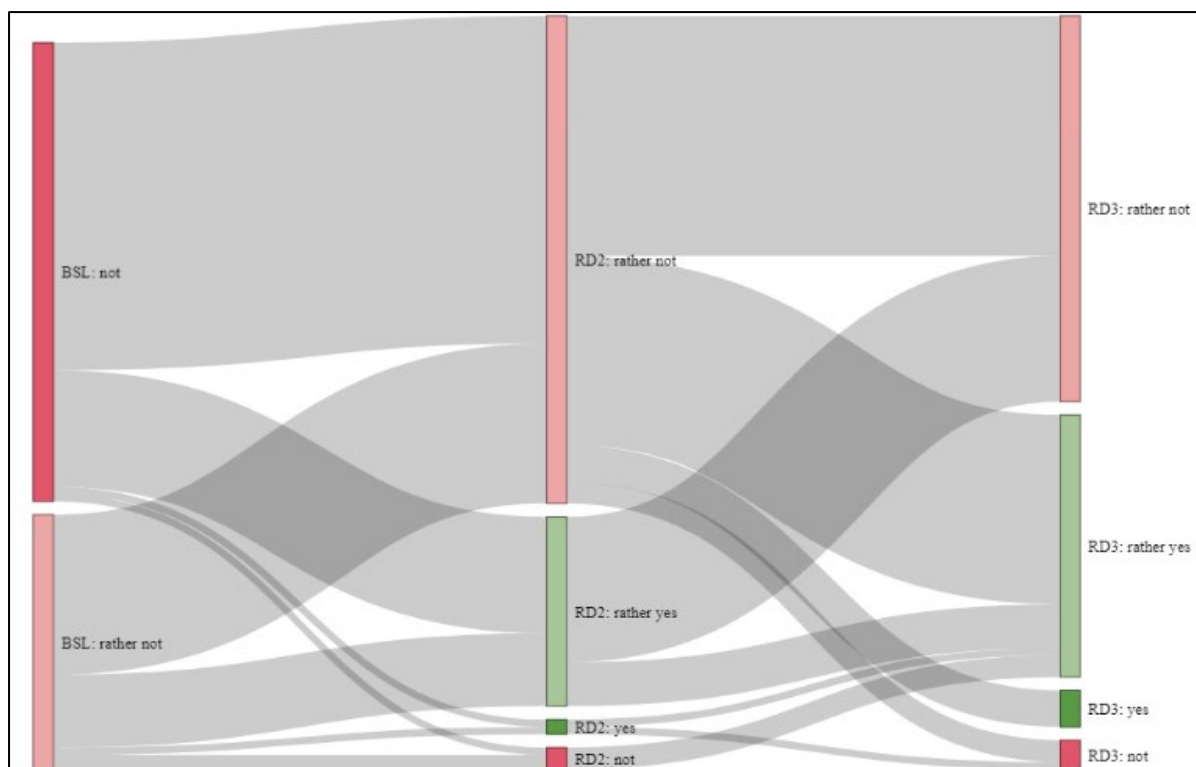
Handwashing facilities with soap and water: 97 of the 114 schools had access to basic hand washing with water and soap available. Of these, 62 schools had functional group handwashing facilities to support the institutionalization of hand washing in school routines. However, access to basic hand washing with water and soap was still found to low in some schools, particularly in the North, due to schools' inability to repair facilities.

WASH FRIENDLINESS SUSTAINABILITY ASSESSMENT

In March and July 2022, USHA conducted an assessment in 98 schools to understand what conditions resulted in a schools' ability to sustain WASH Friendliness. A school was considered to have sustained WASH friendliness if it was still WASH friendly after six or more months following Activity support. Results of the assessment are presented in Figure 3.

The vertical bars in Figure 3 represent the three points in time at which data was collected: BSL–Baseline, RD2–Round 2 (March 2022), and RD3–Round 3 (July 2022). The bands connecting the vertical bars show how schools moved from one category of WASH Friendliness to another over time. The size of the bands corresponds to the number of schools. For the analysis here, the extent of WF was measured in four stages: i) WF School: yes (green bars); ii) Intermediate level of WF: *rather yes* (light green bars); iii) Minimal level of WF: *rather no* (light red bars); and iv) Not WF and no meaningful aspects of WF in place: *no* (red bars). Color coding is also mapped in Table 2. Findings showed that 49 schools had not achieved WASH Friendliness (WF), and that there was considerable movement into and out of WF demonstrating characteristics of WF even in the short period between RD2 and RD3.

Figure 3: Transitions in WASH in School Friendliness Over Time



Round 3 (RD3) of the assessment in July 2022 established that there are different pathways and a combination of conditions through which schools attain and sustain WF. Figure 4 is a path diagram. The path diagram provides all paths that lead to the outcome under study. These paths represent parallel ways in which schools have achieved sustained WASH Friendliness. They are read from left to right. The columns with a colored background represent the seven conditions that were employed in the analysis to explain 87% (13/15) of positive cases in which a school was able to achieve and sustain WASH Friendliness. These include i) School context is conducive; ii) USHA engaged the school continuously and systematically; iii) USHA provided adequate infrastructure/facilities; iv) School was adequately resourced; v) Local stakeholders champion WASH; vi) Local government (LG) demonstrates ownership; and vii) The SHC is well-managed. These are detailed in Table 3.

Table 3: Conditions employed in the analysis to derive paths of WASH friendliness Sustainability

Conditions	Indicators of Presence
School context is conducive	School is easily accessible, not in water-stressed area, vandalism is absent and the enrollment is sufficient and stable
USHA engaged school systemically	Roles & plans of the different stakeholders were concretized, cost-reducing skills like liquid soap making, making of pads were provided, SHC was kickstarted or revitalized, learners & teachers were sensitized on various WASH topics like MHM and LG officials were actively involved
USHA provided adequate facilities	WASH facilities especially latrines provide privacy and are protected against vandalism, designs promote handwashing after latrine use, learners & teachers trained in maintenance
School is adequately resourced	Parents' contributions are broad-based and O&M is sufficiently budgeted for
Local stakeholders champion WASH	SMC or PTA promote WASH, school staff champion WASH and parents practice & demand WASH
LG demonstrates ownership	LG provides available funding, officials participate in monitoring and school events and take lead in engaging the local community
The SHC is well-managed	SHC has a trained patron and an updated/recent workplan

A plus in the column of a condition means that that condition must be present in order for the path to lead to the outcome. A minus means that the path leads to the outcome only when that condition

is not present. If in one of the columns there is neither a plus nor a minus for a given path, this means that this condition is irrelevant for that particular path to the outcome. The two columns on the right side of each diagram with a grey background provide information about the outcome under study (here: sustainable WASH Friendliness) and the percentage of schools reaching the outcome via this path of all schools with a positive outcome. The plus in the first of the two grey columns indicates that the presence of the outcome was analyzed. Individual schools may reach the outcome via several of these paths. Only the first three pathways should be substantially interpreted. Pathways 4 to 7 each apply to one school only.

The first row indicates that 33% of the schools that were able to sustain WASH Friendliness achieved this outcome because USHA provided adequate facilities, the school was adequately resourced, the LG demonstrated ownership, and the School Health Club was well managed. The second path shows that if there are local WASH champions that, among other things, ensure a well-managed SHC, it was sufficient for USHA to continuously and systematically engage the school to achieve sustainable WASH Friendliness. The first and second path could be interpreted as pointing to two scenarios with contrasting causal logics: In the first case, USHA provided hardware interventions in a context where the money (“School adequately resourced”) and political will (“LG demonstrates ownership”) was there to sustain WASH Friendliness. In the second case, success is based on the school community itself – here, USHA’s engagement fell on fertile ground (“Local stakeholders champion WASH”) and sustainable WASH Friendliness was promoted regardless of financial and infrastructural conditions.

Figure 4: Pathways to Sustainable WASH Friendliness

Path	School Context Conducive	USHA		School Community				WASH Friendliness Sustained	Cases Covered
		Systematically engaged (Software)	Adequate facilities provided (Hardware)	School adequately resourced	Local stakeholders champion WASH	LG demonstrates ownership	School Health Club well managed		
1			+	+		+	+	+	33%
2		+			+		+	+	20%
3		+	+	+		+		+	20%
4	+	+						+	1 case
5		-	+			-		+	1 case
6		+	-	-				+	1 case
7	+					-	+	+	1 case

LESSONS LEARNED

- I. **Schools require well-structured and adaptive software and hardware interventions to attain and maintain WASH Friendliness.** USHA and Rotary International supported schools with a combined package of WASH infrastructure and software. In addition to WASH infrastructure, administrators, District Local Governments, and community members must demonstrate local ownership to sustain WF status. This ownership was bolstered through the Activity’s continuous engagement of districts and schools throughout the project cycle. It was critical to have these stakeholders take part in the planning phase and in efforts to collaboratively identify priority schools for support, completion of baseline assessments, and plan key interventions. Through these processes, local stakeholder partners define the critical software and hardware interventions necessary to cultivate WF schools. It is also suggested that school teachers, administrators, and parents be involved in the infrastructure construction process, working closely with contractors to oversee the construction process.

2. **Sustainability of WASH Friendliness.** Sustainable WASH-friendly schools depend on effective SBC campaigns, sound O&M planning and budgeting to sustain WASH facilities, and ownership by parents, school administrators and managers. If any of these stakeholders become less involved, or if there are tensions or issues between them, then maintenance and oversight of WASH facilities and education programs can be undermined. As USHA's WF Sustainability Assessment demonstrated, pathways to sustainability vary by school but facets of continuous and systematic engagement of the schools, hardware support and functional SHC were found to be critical to ensure sustainability.

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