TRANSLATING RESEARCH INTO NATIONAL-SCALE CHANGE: A CASE STUDY FROM KENYA OF WASH IN SCHOOLS

SWASH+

Sustaining and Scaling School Water, Sanitation, and Hygiene Plus Community Impact

EXECUTIVE SUMMARY

Recent years have seen greater attention to achieving national-scale sustainable school water, sanitation and hygiene (WASH) services. Yet practitioners and advocates focusing on school WASH services face manifold challenges and pitfalls. They must engage and develop partnerships with a diverse set of government, community, and development-sector stakeholders and navigate often complex policy environments. They must also develop a robust evidence base, select a coherent set of manageable objectives, learn how to constantly adapt and re-adapt tactics when policies change, identify the right staff given limited resources, and find ways to effectively monitor progress.

Over the past 5 years CARE, Emory University's Center for Global Safe Water, and Water.org, through the Bill and Melinda Gates Foundation-funded Sustaining and Scaling School Water, Sanitation and Hygiene Plus Community Impact (SWASH+) project, have worked to achieve sustainable and national-scale school WASH services in Kenya through applied research and advocacy. The project tested a multi-armed school WASH intervention through a randomized, controlled trial with multiple policy-relevant sub-studies. Research results were then used to advocate for policy change to bring about sustainable school WASH services nationally. These efforts have focused on improving budgeting for operations and maintenance costs, improving accountability systems with a focus on monitoring and evaluation, and more effectively promoting knowledge of WASH through teacher training and the national curriculum.

Advocacy objectives were developed through a problem-tree analysis and stakeholder analyses. SWASH+ used Outcome Mapping to track progress against these objectives.   Specific advocacy goals were to identify important policy intervention areas, work with policymakers to update knowledge and identify learning gaps and then act as a learning adviser to the relevant ministries.

Though the project has not achieved all advocacy objectives, it can claim some advances. Lessons for effective school WASH advocacy gained from the program successes and mistakes are as follows:

1) Having a rigorous evidence base creates large amounts of credibility with policymakers.
2) Significant time and follow-up are needed as well as having staff with appropriate skills.
3) The "ripeness" of the external policy environment is crucial and can make or break efforts to affect national-scale change. Successful advocacy initiatives avoid being insular, focus on the external policy environment at the outset, assess data needs and stakeholder roles and responsibilities, and set reasonable objectives.

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BACKGROUND

Inadequate school WASH access is a subset of the larger global WASH crisis. As in all aspects of the WASH crisis, stakeholders are challenged not only to make expensive infrastructure improvements but to provide services on a daily basis. However, several aspects of WASH in schools differentiate it from community WASH, aspects that must be taken into account if sustainable services at the scale needed are to be achieved.

Although ministries of health are often the ones charged with achieving progress in child health, WASH in schools generally falls under the docket of ministries of education. WASH in schools requires different financial and accountability models than household services, as schools are either government- or community-owned institutions or a mix of both. Unlike household WASH, school WASH services are almost completely dependent on institutional funding and accountability. Given how decentralized they are, school WASH services inevitably rely on many individuals, often teachers, who are subject to little direct oversight. Parents are the primary adults with an interest in the availability of quality school WASH services, but they may not be fully aware of the conditions. In the developing world, a healthy school environment is often a second priority to learning, and so accountability for school WASH is impaired by inadequate local government resources for WASH knowledge promotion, monitoring, and evaluating and managing monitoring data.

The SWASH+ project is a partnership between CARE, Emory University's Center for Global Safe Water, Water.org, the Great Lakes University of Kisumu, and the Government of Kenya, with funding from the Bill and Melinda Gates Foundation and the Global Water Challenge. This 5-year applied-research plus advocacy program in three geographic clusters in western Kenya used research results as the foundation for influencing and advising on the way in which WASH is addressed in approximately 20,000 schools across Kenya and in larger development efforts globally. The research component of SWASH+, led by Emory University, included a cluster-randomized trial (CRT) testing three variants of a WASH intervention implemented by CARE and Water.org that, depending on the study group, included hygiene promotion, water treatment, sanitation improvements, and water source improvements. The CRT captured outcome, impact, and sustainability data over 3 years. A number of quantitative and qualitative sub-studies were also conducted. Research results and stakeholder engagement were used to generate policy priorities for achieving effective and sustained school WASH services. The policy priorities identified were:

1) Improve school-level budgets for operations and maintenance
2) Establish monitoring and accountability systems
3) Improve the sharing of knowledge among all participants from parents and students to teachers and school administrators to government, community and other development-sector participants

Creating an Evidence Base for Advocacy

Wielding effective influence requires sharing information that is in demand by decision makers. Policymakers often operate in an environment where they have to make decisions based on poor or sometimes almost no objective data. The ability to provide positive results and clear recommendations based on tested solutions can be the difference between ineffectual advocacy and achieving real results. Positive results and good recommendations enable an advocating organization to position itself as a technical expert and trusted insider rather than simply as an interest group.

In Kenya the three primary policy objectives followed directly from the analysis of research findings. A key finding of both impact and sustainability research results was the need to dramatically increase operations and maintenance budgets. Several of the interventions in Kenya resulted in improved learning and health. Diarrhea was decreased by about 60 percent in all children in schools that received a comprehensive package of WASH interventions, and absenteeism decreased by as much as 50 percent[1] for girls in schools that received a hygiene plus water treatment intervention. (Figure 1 demonstrates changes in chlorine residuals with different interventions.) However, the level of E. coli contamination increased dramatically on the hands of students in schools that received new latrines. This is likely due to increased latrine use in these schools combined with insufficient attention to latrine cleanliness, anal cleansing and hand washing, all aspects that require daily attention and increased operations budgets. Likewise, 3-year sustainability results, although encouraging for provision of drinking and hand washing water, were poor when it came to expenditures that required operations budgets such as water treatment or provision of soap. In the case of the Ministry of Education in Kenya, significant investments were already being made in the area of school WASH infrastructure. Given the positive short-term results combined with the concerning gaps in regular operations performance, SWASH+ decided to target national budgets provided to each school for operations and maintenance of WASH services.

Figure 1: Percent of Schools with Chlorine Residual in at Least One Drinking Water Container
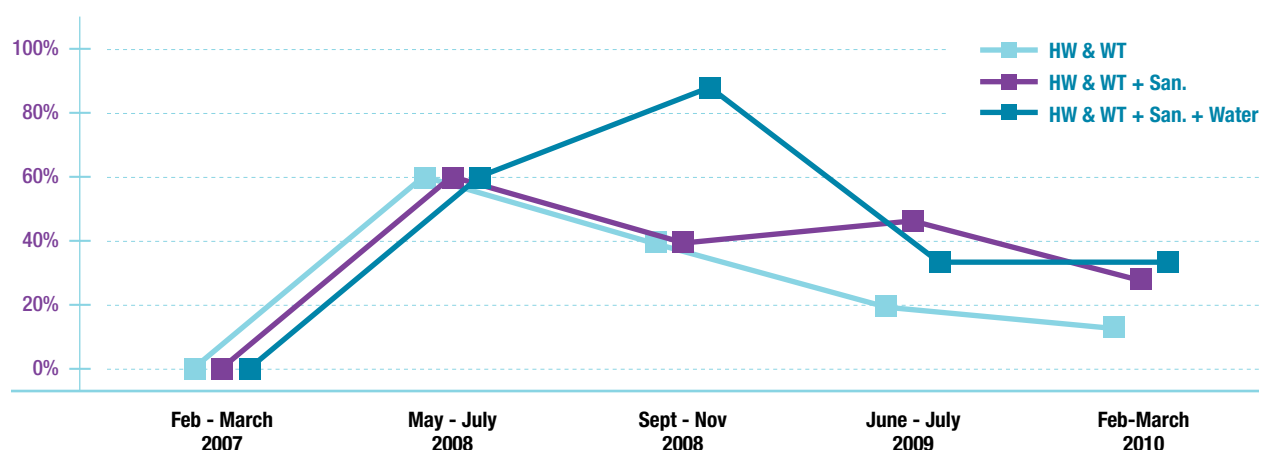
The other two focus issues for SWASH+ emerged out of a problem-tree analysis that pointed to the high level of variability in how effectively schools implement WASH. The suspicion is that this is a result largely of the personal initiative and priorities of school administrations. To encourage performance, SWASH+ has advocated for improved monitoring and accountability systems for school WASH by pushing for standardized monitoring systems, simplified monitoring tools, and an umbrella sustainability charter that will map against the National School Health Strategy. SWASH+ also launched pilots on improving accountability and service-delivery models within the school to potentially identify on-the-ground solutions such as parent-led monitoring that can be brought to scale. (See Figure 2.)

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[1] Freeman MC, Greene LE, Dreibelbis R, Saboori S, Muga R, Brumback B, Rheingans R. *Assessing the impact of a school-based water treatment, hygiene and sanitation programme on pupil absence in Nynaza Province, Kenya: a cluster-randomized trial*. In press: Trop Med International Health.

Figure 2: 2009 School-Reported Budgeting of WASH Components
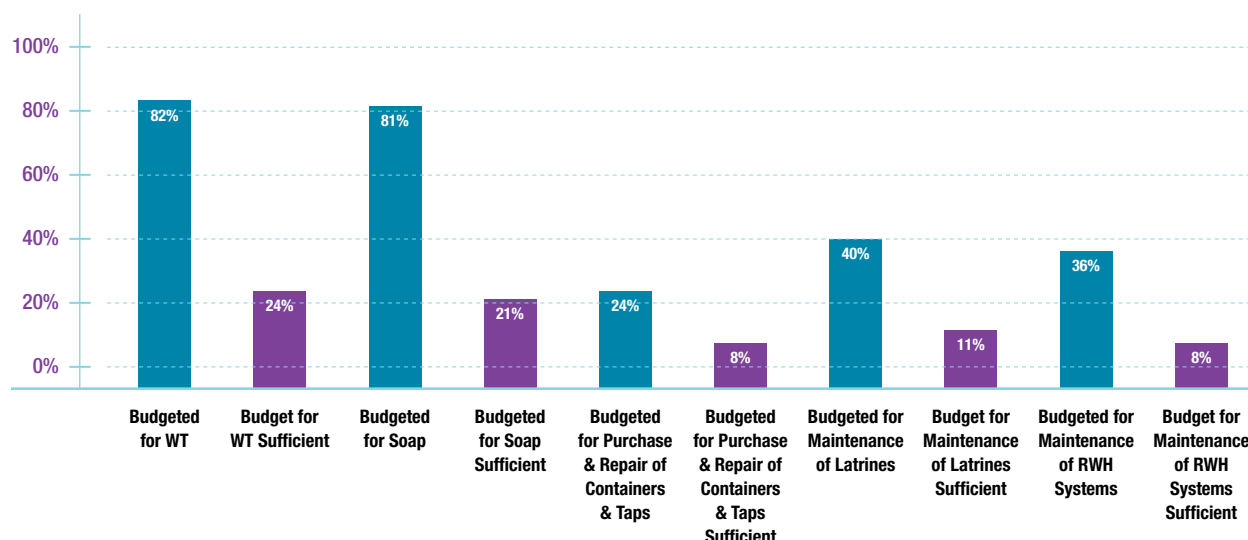
To address potential differences in social norms, for example on hand washing or latrine cleanliness, SWASH+ has focused on the need for curriculum-based training both for in-service teachers and students enrolled in teaching programs. Curriculum and supplementary reference materials were developed jointly by SWASH+ and the U.S. Centers for Disease Control and Prevention and has been promoted with the Kenya Institute of Education. It was also recognized that nationwide marketing of hand washing and cleanliness, by the World Bank's Water and Sanitation Program and through Global Handwashing Day, contributed to improving WASH behaviors and knowledge.

Other contexts will inevitably require differing policy foci; for example paying close attention to budgets for latrine cleaning in schools that have no latrines would be a poor way to focus limited resources. In many contexts, budgeting is much more decentralized, sometimes with parents and communities wielding wide influence over school operation budgets. No matter the model, however, a good evidence base and a flexible and responsive learning agenda are among the keys for effective advocacy.

Influencing at Scale

In addition to building policy positions on the kind of evidence base that key decision-makers are interested in, effective advocacy for sustainable and widespread school WASH services benefits from an organized and deliberate but flexible approach to advocacy: formulating a strategy, tracking progress, and adjusting tactics as needed in response to new developments and key opportunities. The formulation of an initial advocacy strategy is an important step. In the case of SWASH+ in Kenya, initial stakeholder engagement and analysis were undertaken by concerted inclusion of government stakeholders (from school to national level) in key planning meetings. This slowly increased the credibility of the program, for example through presentation of learning results, and allowed SWASH+ partners to learn about the planned initiatives and the priorities of Kenyan government stakeholders. Side meetings with key stakeholders to discuss their priorities and learning demands were also crucial. SWASH+ then undertook an extensive problem-tree analysis[2] to isolate policy barriers to progress, feeding learning into this when appropriate. SWASH+ also developed a stakeholder analysis and mapped potential partners. This kind of robust and multi-faceted analysis is the most critical component of an effective advocacy strategy.

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[2] A number of helpful tools for advocacy, including the problem tree, have been developed and used extensively. See, for example, Overseas Development Institute's *Tools for Policy Impact: A Handbook for Researchers* (London, 2007) or CARE's Advocacy Tools and Guidelines: Promoting Policy Change (Atlanta, 2001).

FLEXIBLE LEARNING

The initial SWASH+ project design focused on testing the Safe Water System in 180 primary schools. In year 3 of the project, partners realized that this narrow focus would not yield adequate information about how well the national government's methodology for giving central grants to a limited number of primary schools in each district would work. The partners added a trial of tracking the government methodology closely in 18 primary schools. Results revealed that districts did not have capacity to review or follow up on individual school planning and that schools themselves require significant support in planning for WASH improvements.

SWASH+ used a variety of tactics to collaborate with and influence government stakeholders, principally collaborative and collegial engagement with government officials who have a high demand for quality information about what works in terms of student health and achievement. Learning has been transferred using numerous strategies such as joint briefings and forums, cultivation of close relationships with SWASH+'s key champions in the relevant ministries, policy briefs, reports, representation in national forums, publishing in peer-reviewed journals and some media engagement in Kenya. As important as the way that learning is transferred, however, are timing and follow-up. Projects such as SWASH+ wishing to influence policy decisions and implementation must be mindful of government timelines and external opportunities such as key conferences. These are crucial leverage points. Being responsive to these kinds of opportunities requires periodic review of tactics and opportunities and the flexibility to respond to new information. Equally, consistent follow-up is needed as even attentive and thoughtful policymakers are often faced with many competing priorities and limited amounts of time and capacity.

Tracking Progress

To establish milestones and track progress, SWASH+ used Outcome Mapping, a methodology developed by the International Development and Research Centre (see Figure 3). This methodology hinges on establishing chains of causality and recognizes that a program can only influence those with whom it has direct interaction. While true impact may be further downstream, progress can only be established with immediately connected stakeholders. The methodology also encourages programs to be aspirational, making it particularly suited to advocacy, with desired outcomes classified as things the program would expect, like or love to see. SWASH+ partners tracked progress regularly through journaling and reflecting.
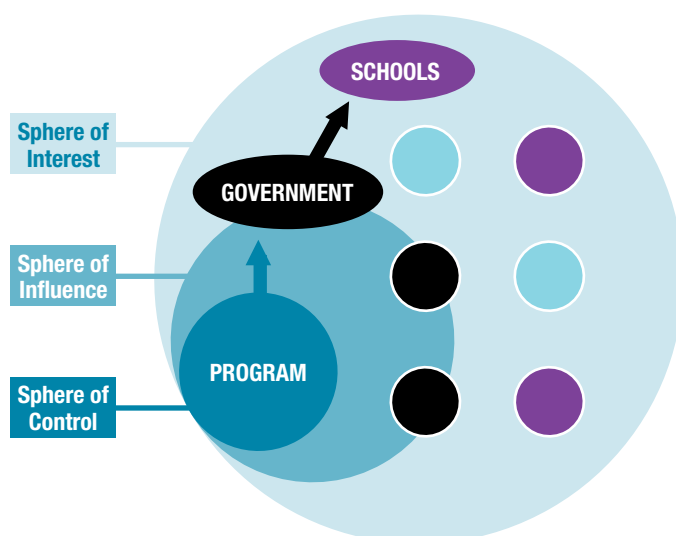

Figure 3: Outcome Mapping methodology plans advocacy goals according to outcomes within the program's direct control, outcomes it aims to influence through direct interaction with other actors, and outcomes it hopes those being influenced will achieve in turn (sphere of interest)

- Beneficiaries
- Stakeholders
- Boundary Partners

*adapted from IDRC (http://web.idrc.ca/en/ev- 26586- 201- 1- DO_TOPIC.html)

The results to date, while incomplete, are significant. Based partially on SWASH+ information, the Kenyan Ministry of Education has doubled the yearly budget that primary schools use for water and sanitation, and further increases are possible pending review. The Ministry of Public Health and Sanitation is undertaking, along with SWASH+ and others, the development of a sustainability charter for all stakeholders covering issues such as accountability and monitoring systems for the broader school health strategy. The Kenyan Institute of Education has approved a WASH textbook and activity book for use in schools and teacher-training colleges.

Ingredients for Success and Mistakes to Avoid

SWASH+'s success can be attributed to some key ingredients. At the same time, the mistakes made or unpredictable outcomes that arose are equally important to provide lessons for those traveling a similar path.

BUILDING CREDIBILITY THROUGH RESEARCH, RELATIONSHIPS AND EXPERIENCE. SWASH+ successfully married the skills of highly credible research institutions with on-the-ground knowledge, relationships, and policy experience of a practitioner organization. This lent the program a high degree of credibility both in Kenya and internationally. Although the cluster-randomized design of the central impact trial was necessary to advance knowledge of school WASH within the wider sector, much of the influence within the government of Kenya was derived from either smaller and less expensive, but still rigorous, trials or short-term qualitative studies. Agencies seeking similar influence will need to consider what level of learning is required to fit the needs of decision-makers, especially if policy influence is the main objective.

MAINTAINING AN EXTERNAL FOCUS. At the start of the project, SWASH+ was too insular, placing more emphasis on internal learning results than on the external environment. SWASH+ government engagement was initially focused at the district level, which was helpful in grounding the program in reality but isolated staff from national efforts. This led to a delay in determining how best SWASH+ could influence government practice and budgeting and contribute to already vibrant efforts for school WASH, for example from the Ministry of Education, the Department for International Development (DfID) and UNICEF. In addition, SWASH+ did not hire any policy staff until the third year of the project because staff focused on building infrastructure and completing behavior-change activities and training associated with the research trial in the early years. This delay in focusing on influencing led to a steeper climb in terms of forming the relationships needed and fully understanding all of the relevant governance systems. However, the eventual recruitment of a policy advisor located in the capital city who was accessible to policymakers and the dedication of budget and time for regular advocacy trips to the capital for other SWASH+ team members has been key to seizing opportunities for influencing.

ALLOWING FOR FLEXIBILITY IN WORK PLANS AND BUDGETS. The flexibility of the Bill and Melinda Gates Foundation in allowing the partnership to adjust budgets and work plans was critical to fit changing circumstances and thinking and allowed the project to fix some of these early errors. This kind of back and forth between the donor and the project, in the spirit of partnership towards a common goal, has been a fundamental element of success.

CONCLUSION

The case shows that national level effective influence is possible through credible learning and defined advocacy. A learning pilot in roughly 200 primary schools contributed to change—even if insufficient—in nearly 20,000 schools nationally. Perhaps more importantly, this kind of programming provides a concrete example of what can happen when development organizations strengthen, rather than circumvent or merely supplement, government roles. It recognizes that the primary agents of change should be institutions that will be around long after the project's funding has ended.

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