

Project WISE

2019 - 2023



This week, without much notice, more than 3,000,000 people around the world moved from their homes in the countryside to a city.¹ This trend of rural to urban migration is certainly not new, but it is growing at a stunning clip. So much so that when coupled with projected birth rates, by 2050 more than 2.5 billion people will be added to our cities.² Alarming, at this mid-point in the century, conservative estimates predict that 1 of every 3 people on the planet will be living in a slum.³ Already, more than 70% of all urban dwellers in Sub-Saharan Africa reside in a slum and more than 40% in South Asia.⁴ That these are the two fastest growing regions in the world should give us serious pause for concern.

While these numbers are intimidating in isolation, in combination they tell a story of significant global restructuring – one that will not be fueled by the expansion of the middle class. These numbers represent a massive exodus by the poorest on the planet into their cities. As their rate of growth continues to aggressively outpace service capacity, this creates and further extends slums and resource poor neighborhoods of unimaginable density, size and complexity.

Ensuring equitable access to basic care and services is critical to the success of these communities and by extension, the trajectory of the cities they live in.

Within the broad spectrum of immediate needs in these low resource communities, WASH services (Water, Sanitation and Hygiene) are top-tier necessities yet these same communities are, for myriad reasons, first to be overlooked in city planning and last to be served by adequate utility services.⁵

All of this leads to a constellation of insurmountable barriers that have forced many families out of the system entirely, leading to widespread consumption of unsafe water, a dangerous absence of routine handwashing and limited opportunity to access and use safe sanitation

Poor WASH conditions are a vicious cycle: both a cause and an effect of extreme poverty.

With population estimates continuing to rapidly inflate while service projections remain stagnant, urban WASH has become a lightning rod topic as there are no clear blueprints of success to take to scale.

How, then, can we effectively respond to the enormity of such an unbalanced and inequitable situation?

At Splash, we've been working on the answers to that for more than a decade across 8 countries. While there's certainly no single solution set, we do believe there is a fast way to not only attend to the greatest need in the short term while also setting up successful healthy lifelong behaviors in the long term.

BE LASER-FOCUSED ON THE WHO

The marginalization of these communities from the mainstream of society has created major health lags that are disproportionately high in slum and resource poor neighborhoods. In fact, modern estimates go so far as to suggest that living in slums is associated with statistically significantly worse health for urban children than their peers living in rural areas.⁶

Conceding that no intervention can serve everyone, Splash's model of innovation is based on first attending to the needs of the most vulnerable children living in the poorest conditions within the largest cities.

To be both efficient and effective across these sweeping cities, our WASH solution is based on a simple fact: There is no faster way to reach the highest concentration of poor urban children than through city schools.

Schools are already nestled in the greatest pockets of poverty within these cities – they are integral hubs of the very communities we focus on. Additionally, more than 80% of children living in these areas attend a public school.

Splash's goal is thus to work across every city school to ensure that from kindergarten through secondary school, all students have improved WASH services and right-sized education for each grade across their entire academic career. 100% of schools.

Importantly, studies continue to show that children are the best "agents of change" within their communities and households.⁷ They can greatly influence both the WASH activities and the purchasing behaviors of their families in ways once thought exclusive to parents or adults. Children and their immediate circles of influence (schools, families, communities) also represent the greatest opportunity to break the cycle of poor WASH conditions.

Using schools as the beachhead is the fastest and most efficient pathway toward both immediate and generational change.

BE STRATEGIC ABOUT THE WHERE

The largest concentration of dense mega-cities is heavily skewed to South Asia and Africa. In fact, by the end of the century, those two regions will house 19 of the largest 20 cities.⁸ This massing of populations could allow for successful interventions, once proven to be effective and affordable, to spread quickly across borders with limited barriers for scale. Thus, it is important to regionally contextualize a solution set that limits the number of variables in future adaptation.

With this in mind, Splash has focused on two key cities: Addis Ababa in Ethiopia and Kolkata in India. For reasons we expand on later in this document, we believe both cities represent the perfect proof points for this model. Proving success in both cities won't necessarily provide the roadmap for work in adjacent cities and countries— though it will get us a lot closer to that goal.

Demonstrating cost efficiencies, health impact, quality implementation and durable programming at scale is key to any hope of replication. Doing so in two of the biggest growth cities, in the two fastest growing regions of the world, is intentional toward that goal.

INVOLVE GOVERNMENT AT EVERY STEP

Beyond logistics and shared values, government funding is an essential ingredient for high quality infrastructure on the front-end of our work and for service and maintenance costs on the tail-end. There is thus deep collaboration and close coordination that must happen with local and federal governments in each country for these projects to succeed.

Education departments are legally required to run schools that treat children with dignity and provide healthy conditions for students to thrive. The communities they serve desire the same outcome. By working more closely with the disparate stakeholders of government and the urban poor, we act as a bridge for both sides.

Additionally, to succeed in this work, Splash forges relationships directly with the very utilities that are responsible for water and sanitation provisions to slum and low resource communities. That we are able to leverage our work together toward outcomes in schools can potentially translate to better outcomes in communities over time.

PROJECT WISE (WASH IN SCHOOLS FOR EVERYONE)

What would it look like if every student living in urban poverty experienced the same incredible WASH conditions from their entry into the school system in Kindergarten until their exit from Secondary School? The same levels of safe water? The same enabling environment for clean hands, child-friendly toilets and menstrual health products and services? The same supporting infrastructure, recurring education from teachers, and habit reinforcement from the adults at the school?

What would it look like if city, state and federal government supported this work with adequate funding? What if each school, from their administrators to their parent-teacher associations were directly involved in routinely plotting and correcting goals because they had clear and consistent data to guide those decisions? What if the janitors at each school were prized for their engagement, if teachers were awarded for

their leadership, and if student groups led the design of key programs within their schools? Would things change?

That's the bet we are making – that this work will have a growing, lasting, and replicable effect if we are able to provide for all schools, not just a few.

We want nothing less than to create the last generation of kids to lag behind because of poor WASH.

The population swing we are now witnessing— as the majority of the world looks toward and moves into cities for social, financial and educational gains— represents the largest migration the world has ever witnessed. This change fundamentally alters the ways we will function, plan, govern and allocate resources.

By the end of the century, the percentage of people living in the world's 100 largest cities is estimated to reach as high as 1/4th of the world's population.

Although the population gains projected for these cities are staggering, we are on the front end of this unprecedented growth curve. We actually know where the gains will happen. This gives us a chance to plan for, catch up to, and ultimately get ahead of the major WASH gaps facing the poorest.

Unlike rural conditions, cities traditionally have a deeper pool of talent, a stronger network of supply chains, greater concentration of accessible government, clear links to private sector initiatives and actors, and even local funding streams that can be tapped into. The ingredients for a coherent and sustainable market are already there.

Getting ahead of urban WASH poverty before it becomes irreversible is not a luxury. It is critical to de-risk the solution set now if we want to guarantee the future success of these cities. If we continue to get it right, we can completely re-envision what success looks like, and how it is achieved, for the poorest.

- 1 <https://www.iom.int/sites/default/files/country/docs/syria/IOM-World-Migration-Report-2015-Overview.pdf>
- 2 https://www.un.org/en/events/citiesday/assets/pdf/the_worlds_cities_in_2018_data_booklet.pdf
- 3 <https://unhabitat.org/books/world-cities-report/>
- 4 <https://www.who.int/bulletin/volumes/87/12/09-073445/en/>
- 5 <https://openknowledge.worldbank.org/bitstream/handle/10986/15774/78679.pdf?sequence=1&isAllowed=y>
- 6 <https://static1.squarespace.com/static/53c31c5ce4b053fc7d131b18/t/594a10a2e58c6273f032cc12/1498026149431/2017-06-01+-+SlumChildHealth+-+final.pdf>
- 7 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2955038
- 8 http://media.wix.com/ugd/672989_62cfa13ec4ba47788f78ad660489a2fa.pdf

Taking a citywide approach in both target cities, Splash will scale a WINS programme that includes infrastructure, behaviour change training, and strengthened menstrual hygiene management services, with strong sustainability measures. The programme will take place at kindergarten through secondary government schools with large concentrations of underserved young people, typically living in the poorest communities.

The intended outcomes will be achieved by delivering the following outputs for each intended outcome.

OBJECTIVE 1: IMPROVE WASH INFRASTRUCTURE IN SCHOOLS TO CREATE THE ENABLING ENVIRONMENT FOR HEALTHY BEHAVIOURS

To reach 100% of schools in Addis and 90% of schools in Kolkata with advanced water, sanitation, and hygiene services, three major outputs will be delivered. First, Splash will install water filtration systems, water storage tanks, and designated drinking water stations and taps. Second, they will install designated handwashing stations and taps. Third, they will renovate existing toilets and construct new urinals and toilets. Toilet features will include concrete flooring, tile, paint, durable toilet pans, water for flushing and cleansing, proper ventilation and lighting, and accessibility features for children who are mobility impaired.

OBJECTIVE 2: PROMOTE WASH BEHAVIOUR CHANGE IN CHILDREN AND ADULTS

To ensure that children wash both hands with soap and water after using toilet and before eating and that sanitation facilities meet standards on cleanliness, proper use, and maintenance, Splash will implement a multi-faceted behaviour change programme, based on the Behaviour Centred Design framework of the London School of Hygiene and Tropical Medicine, to encourage children to adopt hygienic practices. In the first year of intervention at each school, this will include orientation with school leadership and Parent Teacher Associations, training two focal teachers per school to manage the Student Hygiene Club, forming a Student Hygiene Club, ensuring schools conduct an annual soap drive or procure soap through an alternate method and installing behavioural “nudges” that cue subconscious triggers to promote proper use of WASH infrastructure. In Years 2-5, schools will receive additional support to reinforce Year 1 activities along with refresher trainings in case of teacher and staff turnover.

OBJECTIVE 3: STRENGTHEN SCHOOL-BASED MENSTRUAL HYGIENE MANAGEMENT (MHM) SERVICES FOR GIRLS AGED 10 AND OVER

Splash will strengthen MHM services through hardware and software improvements targeting girls age 10 and above at 100% of schools in Addis and 90% of schools in Kolkata. This work will build on the sanitation work described above, to further improve sanitation facilities for girls through gender-segregated toilets, doors with locks to ensure privacy, water availability, and waste disposal inside each stall. In addition, Splash will deliver targeted MHM behaviour change interventions, as part of the project-supported hygiene program, including: education sessions on puberty and menstruation for all children over 10 years of age, Q&A sessions for girls, product demonstrations (girls only), and school celebrations of Menstrual Hygiene Day. The MHM approach will be optimized as data are gathered and analyses conducted on girls' school-based MHM needs in year one of the programme.

OBJECTIVE 4: DEVELOP A SCALABLE, DURABLE, AND COST-EFFICIENT WINS MODEL THAT CAN BE EFFECTIVELY REPLICATED BEYOND THE INITIAL TARGET CITIES AND COUNTRIES

Through this project, Splash will design a scalable and cost-effective WINS model by 2023. Key outputs include: 1) Engage schools and government stakeholders through advocacy in building, maintaining and supporting WASH infrastructure to achieve scale and maximize sustainability; 2) Market development for spare parts suppliers and maintenance service providers to ensure effective operations and maintenance; and 3) Document and disseminate key aspects of Splash's WINS model, including their Programme intervention, cost drivers, and partnerships framework, to other implementers, policy-makers, donors and decision-makers. This will include creation of a detailed life cycle cost model for WINS in Addis Ababa and Kolkata to document short and long-term costs for governments and individual schools.

Reductions in diarrhoea and absenteeism will be verified through an independent evaluation. As part of this, we will employ fingerprint recognition to monitor absenteeism. Water quality will be verified through a field-testing tool. EME, through its evaluators, will verify completion and handing over of infrastructures to governments.



PROJECT WISE

Over the next five years, we are focused on reaching 100% of government schools in two major growth cities: Addis Ababa, Ethiopia and Kolkata, India.

This initiative, **Project WISE (WASH-in-Schools for Everyone)**, will bring improved water, sanitation, and hygiene infrastructure; behavior change programs for kids and adults; and strengthened menstrual health services for girls aged 10 and above.

Working in kindergarten, primary, and secondary schools, this project will reach large concentrations of underserved young people, typically living in the poorest urban communities.

Our goal is to demonstrate a scalable, durable, and cost-efficient WASH-in-Schools (WINS) model that can be effectively replicated beyond the initial two target cities and countries. For the first time, all government schools in Addis Ababa and Kolkata will have clean drinking water, handwashing stations, and child-friendly toilets that are cost-effective and sustainable.

The impact will be healthier students and improved school attendance, especially for girls.

2 MAJOR GROWTH CITIES

1,600 SCHOOLS

1,000,000 CHILDREN

\$45,000,000 BUDGET

2019 - 2023 TIMELINE



EXCLUSION FROM THE MAINSTREAM IS THE NORM FOR THE URBAN POOR

THE GLOBE IS CHANGING

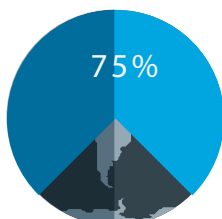
FROM NAIROBI

We already know the challenge of developing cities: Even where there is promise of prosperity or opportunity, it is muted by poverty, hunger, and ill-equipped systems for educating and protecting the children growing up there.

TO MUMBAI

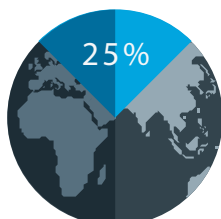
BY 2050

3/4 OF THE WORLD'S
POPULATION WILL LIVE
IN CITIES.



BY 2030

1/4 OF THE WORLD'S
POPULATION WILL LIVE IN
URBAN SLUMS.



Clean water and decent sanitation are basic human rights, as recognized in the United Nations Sustainable Development Goal 6 – clean water and sanitation for all.

Unsafe drinking water and a lack of water or soap for handwashing are responsible for 2.2 million deaths each year, 90% of whom are children.

Given rapid population growth and urbanization, many governments already struggle to provide equitable WASH services to urban communities. As a result, children in slum and resource poor neighborhoods significantly lag behind in health and education.

The problem is growing worse by the day as **3 million people move into cities every week around the world.**

We now have an opportunity to change the course of the future and make cities more livable for the urban poor.



THE FACE OF POVERTY IS SHIFTING

THE POOREST OF THE POOR ARE NO LONGER THE FARTHEST AWAY.
THEY ARE INCREASING IN CITIES.

WE ACTUALLY SEE THIS AS
AN AMAZING **OPPORTUNITY**

THE OPPORTUNITY TO DO GOOD BETTER

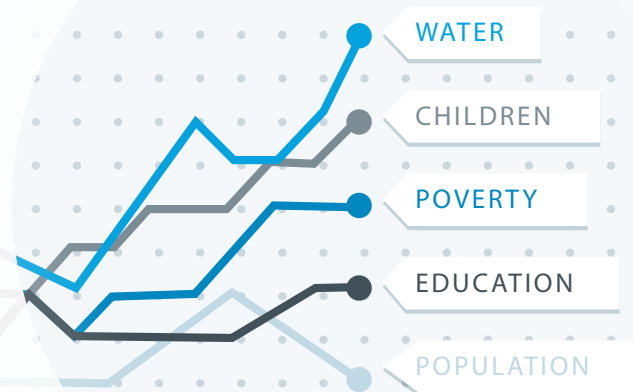
Splash believes that the density of urban poverty creates new opportunities for solutions. And these solutions can scale.

Splash now serves over 430,000 kids in eight countries. In 2017, we achieved a ten-year milestone of reaching every orphanage in China with water filtration systems, serving 1,100 orphanages across the country, while benefiting 190,000 children and adults. In addition, Splash projects have reached 70% of the schoolchildren in Kathmandu, Nepal. Now, we are on track to ensure WASH coverage at 100% of public schools in Kolkata, India and Addis, Ababa, Ethiopia.

THE FUTURE OF WASH HOLDS KEYS TO THE FUTURE OF INTERNATIONAL DEVELOPMENT

No one is claiming that international charity and development—as they’ve been conducted to date—have been overwhelmingly successful.

But the following ten steps are proving effective with water, and may well hold the keys to the future of international development, as a whole.



KEY 10 STEPS GETTING TO SOLVED



1/10 KEY STEPS: GETTING TO SOLVED

SCHOOLS

OBJECTIVE: WASH IN SCHOOLS FOR HEALTHY AND EDUCATED KIDS



SCHOOLS ARE ALREADY NESTLED IN THE GREATEST POCKETS OF POVERTY IN EVERY CITY



THEY OFFER A UNIQUE ACCESS POINT FOR LONG-TERM IMPACT



CHILDREN ARE CHANGE AGENTS FOR FAMILIES AND COMMUNITIES

Schools are everywhere, even in the poorest urban communities.

Our decade of experience has shown us that schools serve as a platform for influencing and communicating norms, modeling rights and responsibilities, and providing space for community development, not just for students, but also for adults – government administrators, parents, teachers, and staff – who are invested in their success.

We believe that school-based WASH programs have the greatest potential to transform the long-term behaviors of children, their families, and the broader community. Moreover, WASH interventions in schools have been associated with reductions in school absenteeism, as well as illness and diarrhea.

By creating locally-owned change in schools, we can create a shift in society where communities will expect and demand safe water and decent toilets, as a human right.



2/10 KEY STEPS: GETTING TO SOLVED

WATER

OBJECTIVE: GUARANTEE CONTINUOUS SAFE WATER ACCESS

2

CLEAN WATER IS THE BEST MEDICINE

LEVERAGE COMMERCIAL GRADE WATER FILTRATION SYSTEMS FOR NEW USERS

ENSURE WATER IS SAFE AND RELIABLY FLOWING AT ALL TIMES

Everything we do starts with clean water.

We use the same technology and supply chains as world-class restaurants and hotels to make quality water possible for kids living in urban poverty. We install commercial-grade water filtration systems that remove 99.9999% of bacterial pathogens. The result is water we would serve our own children, without hesitation.

It's not enough to make sure the water is safe; it needs to be available whenever kids are present. We make sure schools have sufficient water storage, so that there is always water for drinking, handwashing, flushing, and other school needs.

Splash also provides durable, child-friendly drinking and handwashing stations that incorporate behavioral nudges like bright colors and different basin depths to encourage use and separate handwashing and drinking behaviors.

In Addis Ababa, Ethiopia, only 6% of schools had reliable access to water throughout the school week. In Kolkata, India, 56% of schools had water that tested positive for E. coli.

Independent verification through third party water quality laboratories



BEFORE



AFTER



3/10 KEY STEPS: GETTING TO SOLVED

SANITATION

OBJECTIVE: PROVIDE CHILD-FRIENDLY TOILETS THAT FUNCTION AND LAST

3

CONSTRUCT ADDITIONAL TOILETS
SO THAT KIDS CAN GO WHEN THEY
NEED TO

UPGRADE EXISTING FACILITIES TO
MAKE THEM USEABLE

LEVERAGE LOCAL SUPPLY CHAINS
TO MAKE THE INTERVENTION
SUSTAINABLE

Whether you are a boy or a girl, you need to be able to access a decent toilet. It's a matter of basic health and dignity.

Splash believes that every school should have child-friendly toilet facilities. Yet, too many kids lack access to decent toilets, and too many girls don't have access to safe and private stalls when they have their period.

We address this through toilet rehabilitation and new toilet construction. We ensure school toilets are outfitted with robust hardware and other measures to meet global standards for safety, privacy, cleanliness, and accessibility.

Facilities include concrete flooring, tile, paint, durable toilet pans, doors that lock, water for flushing and cleaning, proper ventilation and lighting, and accessibility features for children who are mobility impaired.

A survey of 60 developing countries found that less than 1/2 of primary schools have access to safe water and 1/3 have adequate sanitation.

United Nations Children's Fund, Annual Report 2008, UNICEF, New York, 2008.



BEFORE



AFTER



4/10 KEY STEPS: GETTING TO SOLVED

HYGIENE

OBJECTIVE: CREATE THE CONDITIONS FOR ROUTINE HANDWASHING WITH SOAP

4

CREATE AN ENABLING ENVIRONMENT THAT PROMOTES HEALTHY HANDWASHING

STUDENTS ACT AS THE PRIMARY EDUCATORS AND CHAMPIONS

LAYER ON ENVIRONMENTAL NUDGES TO PROMOTE SOAP USE

Safe water and child-friendly toilets alone can't eliminate water-borne illness. Handwashing with soap is critical.

Splash's program starts with engaging and reliable handwashing stations. These stations integrate powerful motivators and environmental cues like mirrors and bright colors to increase child use and handwashing rates.

Our curriculum is designed to engage both kids and adults. Experiential learning is key. No textbook, alone, can do the job. Kids and teachers giggle, sing, and learn as they gain hands-on-experience in practicing the six steps of effective handwashing and how to promote healthy behaviors in others.

Child clubs then encourage healthy WASH behaviors across the school through positive peer pressure. These clubs, and the activities and curriculum we developed in collaboration with government actors, are refreshed regularly to keep children engaged, amused, and motivated.

While 55% of schools had a handwashing basin on the school premises, only 43% had a single functioning tap and only 6% had any soap for handwashing.

Independent verification through citywide surveys conducted in concert with government and conducted by third party enumerators.



Splash hygiene club member demonstrating products on Menstrual Hygiene Day 2018.

5/10 KEY STEPS: GETTING TO SOLVED

MENSTRUAL HEALTH


OBJECTIVE: STRENGTHEN SCHOOL BASED MENSTRUAL HEALTH SERVICES

5




GIRL-FRIENDLY SANITATION FACILITIES

Splash's menstrual health approach includes both hardware and software solutions. First, we ensure access to girl-friendly sanitation facilities. We also work to change behaviors and social norms through puberty and menstrual health education.



EDUCATION AND AWARENESS EVENTS FOR GIRLS AND BOYS

Splash delivers education to both girls and boys to normalize periods and reduce stigma with additional support and trainings just for girls to provide more specific information on the practicalities of managing menstruation.



TRAINING TEACHERS AND PARENTS TO PROVIDE KNOWLEDGE AND SUPPORT

Through formative research and pilot interventions, we look at key barriers and motivators for girls, access to hygiene products at schools, as well as peers within their social networks that influence how they perceive their menstrual health.

Only 14% of schools in Addis Ababa and 9% of schools in Kolkata have facilities for menstrual hygiene management. Independent verification through citywide surveys conducted in concert with government and conducted by third party enumerators.



Splash hygiene club member engaging her peers around student-led handwashing activities.

6/10 KEY STEPS: GETTING TO SOLVED

BEHAVIOR CHANGE

OBJECTIVE: PROMOTE AND PROVOKE HEALTHY HABITS IN KIDS AND ADULTS

6

INFRASTRUCTURE ALONE IS NOT ENOUGH

NEW ATTITUDES, BEHAVIORS, AND HABITS ARE ESSENTIAL FOR SUCCESS

LEVERAGE THE SAME MARKETING TECHNIQUES THAT SELL PRODUCTS FOR NEW USERS AND USES

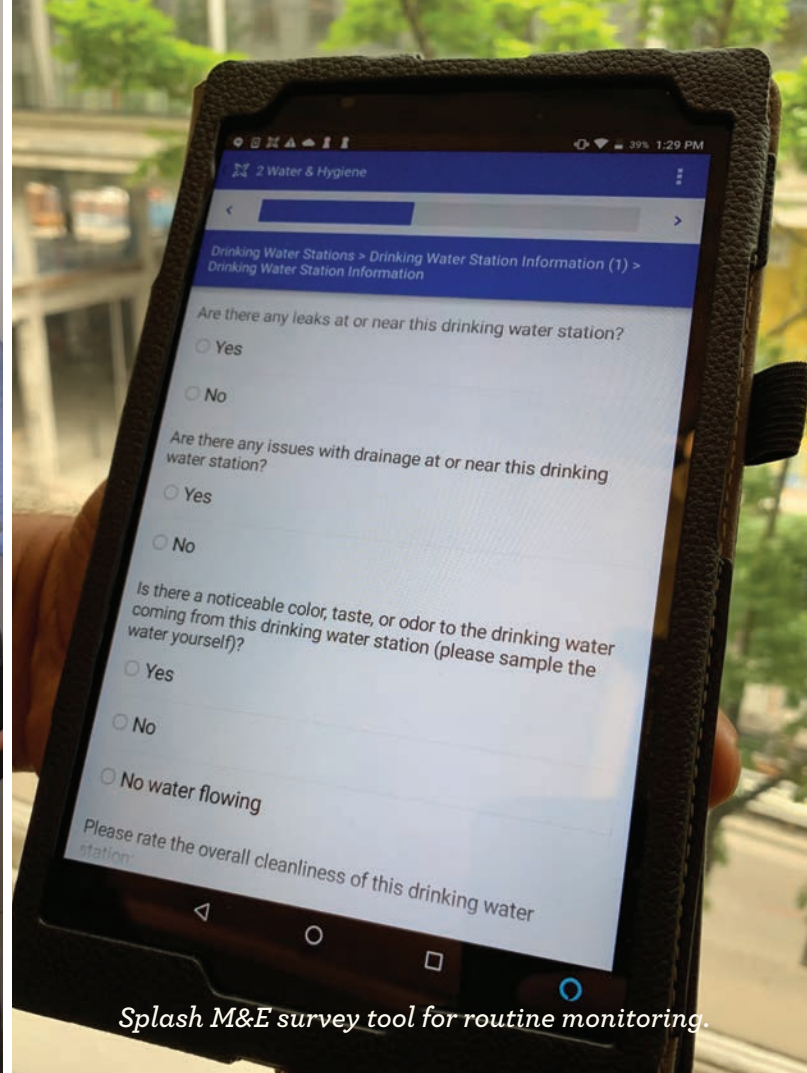
Splash implements a multi-faceted behavior change program at each school, targeted to children and adults, based on the Behavior Centered Design framework of the London School of Hygiene & Tropical Medicine. Our behavior change intervention merges knowledge, norms, emotions, and habits to create lasting change.

While creating the infrastructure and enabling environment for kids to access water, toilets, and handwashing is critical, equally important is the work done daily in classrooms and on school grounds with students, teachers, and parents to encourage healthy new behaviors, like regular washing of hands by students, consistent cleaning of toilets and proper care of infrastructure by staff, and long-term funding for routine service and maintenance of all WASH infrastructure by education officials.

During a six-month study that Splash conducted at 24 schools in Nepal, we found that handwashing rates increased from 9.4% to 65%, due to our comprehensive behavior change approach.



Splash M&E staff using tablets to collect monitoring data.



Splash M&E survey tool for routine monitoring.

7/10 KEY STEPS: GETTING TO SOLVED

MONITORING & EVALUATION

OBJECTIVE: OPENLY ASSESS PROGRAM SUCCESS AND OUTCOMES

7

EXTERNAL EVALUATION BY LEADER IN THE FIELD

What gets measured gets done.

Splash conducts routine monitoring twice per year at every school to assess the impact of our intervention against key performance indicators, thereby identifying areas for programmatic improvement.

OUTCOME 1: STUDENTS ARE HEALTHIER

As part of Project WISE, the London School of Hygiene & Tropical Medicine will also conduct a multi-year evaluation to assess the impact of Splash's interventions at schools. The study will be a simple randomized control trial with one cohort of 80 schools in each city compared two years later. The impacts the study aims to assess are better health and increased school attendance, especially for girls. Results are expected for publication in 2024.

OUTCOME 2: SCHOOL ATTENDANCE IMPROVES, ESPECIALLY FOR GIRLS

Splash and our evaluation partners will utilize a sophisticated suite of technology tools to track and evaluate our progress.

Splash's monitoring approach is broadly aligned with the UNICEF/WHO Joint Monitoring Program's WASH-in-Schools framework.



TRADITIONAL PILOT



100% COVERAGE

8/10 KEY STEPS: GETTING TO SOLVED

100% COVERAGE

OBJECTIVE: PROVE THE MODEL THROUGH A CITYWIDE APPROACH

8



PILOT PROJECTS RARELY LEAD TO
SYSTEMIC CHANGE



RISK-AVERSE GOVERNMENTS
REQUIRE REAL PROOF



BUY-IN IS EVERYTHING

Proven success at scale compels attention.

While most international development work is conducted at a limited, pilot project level, Splash takes a unique 100% coverage approach to reach every government school, citywide.

We engage key stakeholders including schools, government, local business, and the NGO community towards true systems change.

100% coverage of the target population does not equal “goal achieved.” It simply signals the time to hand over our model to local actors who can keep the work going—more appropriately and just as effectively.

Project WISE will demonstrate the feasibility of a citywide approach and the clear roadmap for replication.



Directors of Addis Ababa Bureaus of Finance, Education, and Construction signing funding commitments toward 50% of all in-country costs for Project WISE.

9/10 KEY STEPS: GETTING TO SOLVED

HAND OVER THE REINS

OBJECTIVE: ENSURE THAT GOVERNMENT MAKES THIS PROGRAM THEIR OWN

9

GOVERNMENT IS THE END CUSTOMER

Our ultimate goal is government adoption of the Project WISE intervention. In Kolkata and Addis Ababa, the municipal agencies are taking action to improve WASH-in-Schools, supported by national mandates and strong political will.

SIGNIFICANT CO-INVESTMENT IS THE KEY TO LONG-TERM SUCCESS

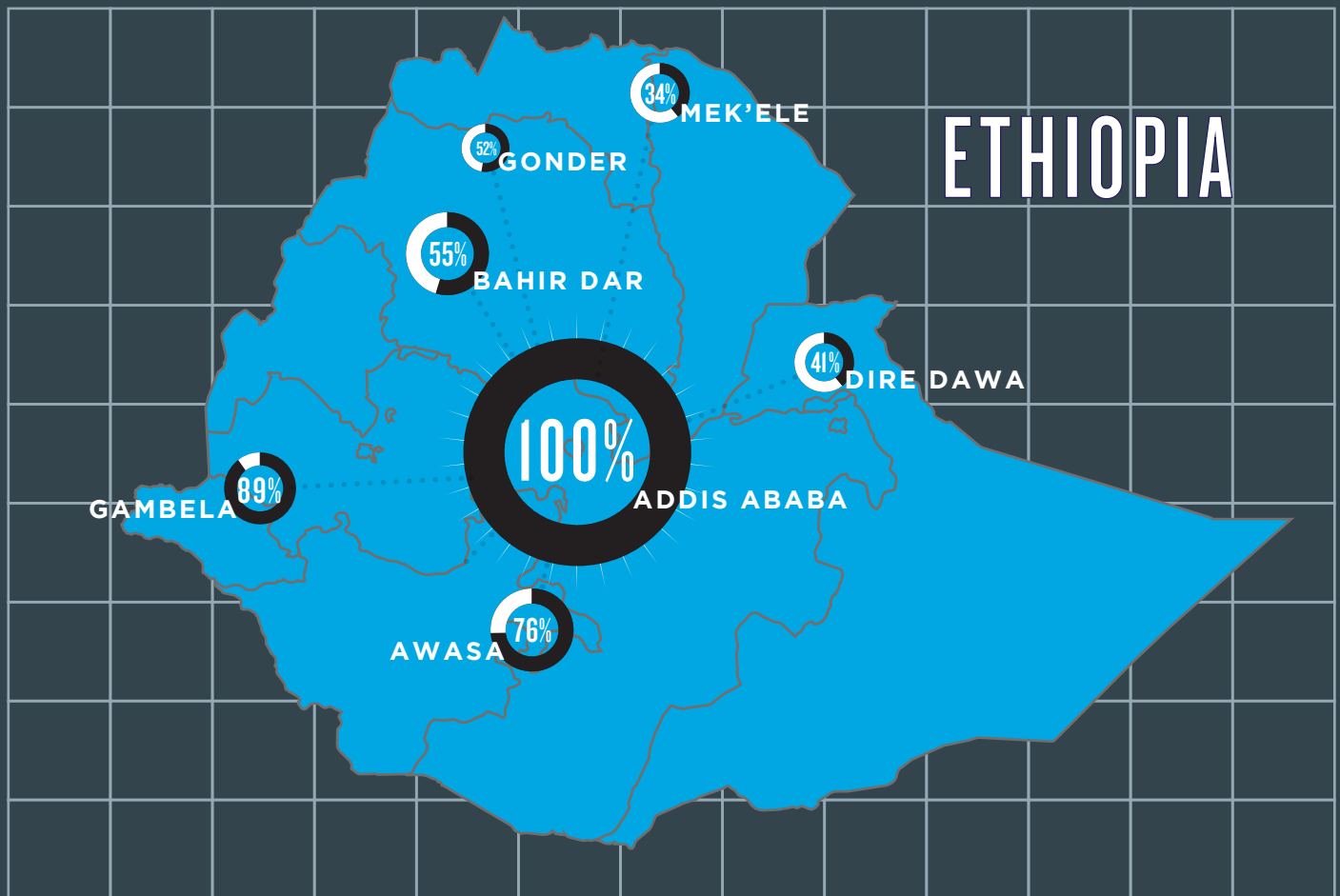
However, they lack sufficient funding for the full up-front capital expenditure required to improve WASH infrastructure.

CLEAR SOLUTIONS, CLEAR IMPACT, AND CLEAR COSTS ARE CRITICAL FOR GOVERNMENT ADOPTION

To ensure buy-in, Splash requires that governments fund a significant proportion of total project costs - up front, during, and after.

With a proven model of impact and scale, clear evidence of efficient costs, and connection to robust local supply chains, we will ensure that government can adopt the program and fund it for the long-term.

The Addis Ababa Education Bureau has committed \$8 million to Project WISE in Ethiopia.



10/10 KEY STEPS: GETTING TO SOLVED

REPLICATION

OBJECTIVE: SUPPORT THE GOVERNMENT TO SCALE THE PROGRAM NATIONALLY

10

CHARITY CAN BE A CATALYST FOR
LOCALLY-DRIVEN SOLUTIONS

Splash believes that charity can catalyze local solutions. With Project WISE, we aim to demonstrate a scalable, durable, and cost-efficient model that can be effectively replicated beyond the initial cities and countries.

IF YOU DID IT RIGHT, YOU'RE NO
LONGER NEEDED

Our job is to co-create the road map to success, prove it possible at scale, train local actors to do the work, build relationships with government to increase investment, mobilize communities, and then, quite simply, get out of the way.

LOCAL BUSINESS, NGOS, AND
GOVERNMENT NOW "CARRY THE
WATER"

The ultimate outcome of success, to us, means that our initial proof of concept, at 100% coverage - laid the foundation for (1) local solutions to thrive, and (2) national government to take it towards national coverage. What has been proven at scale in a large city can now be replicated, at scale, in others.

Using the initial launch city as the model, the path to national coverage of all cities is possible with government (not charity), playing the leading role.

Project WISE: 2019-2023

FUNDING STATUS - 2019-2020



Project WISE represents the front line of emerging global efforts between governments and philanthropy to co-invest toward lasting and scaled solutions.

With lead investments from the Children's Investment Fund Foundation, and the governments of Ethiopia and India, this project is supported by a diverse array of corporate, foundation, government, individual and community organizations.

Following a three-month start-up phase at the beginning of 2019, with a heavy focus on scaling up general operations and hiring key staff, Splash's implementation has now begun in earnest. We are adopting a phased geographic approach focused on certain sub-sections of each city in order to operate as efficiently as possible.

LEAD INVESTMENT



CO-INVESTMENT





Students in Kolkata bring soap from home to create conversations and buy-in from their families.

INDIA

KOLKATA

India, with 1.3 billion people, is the second largest country in the world by population. Kolkata is the third largest city with over 14 million people living in the Kolkata metropolitan area. Diarrheal disease and respiratory infections account for approximately 26% of deaths among children aged 5-14 in India, indicating a need for improved water, sanitation, and hygiene.

Situated in a landscape of poverty and dramatic income inequality, the primary challenges faced by schools in Kolkata include poor water quality, high population density, limited physical space for sanitation facilities, and a tumultuous political environment.

BY THE NUMBERS

1,200 SCHOOLS
400,000 STUDENTS

95% of the city's schools had access to water, **70%** of schools had water that tested positive for Total Coliform, and **56%** tested positive for E. coli.

55% of schools had a handwashing basin on the school premises, only **43%** had a single functioning tap, and only **6%** had any soap for handwashing.

91% of schools had a toilet, **47%** were not gender-segregated, **33%** had no water for flushing, **34%** had no lighting or ventilation, and **35%** had no door or lock for privacy.

91% of toilets had no facilities for menstrual hygiene management.

Project WISE: 2019-2023

IMPLEMENTATION & EVALUATION PLAN: KOLKATA



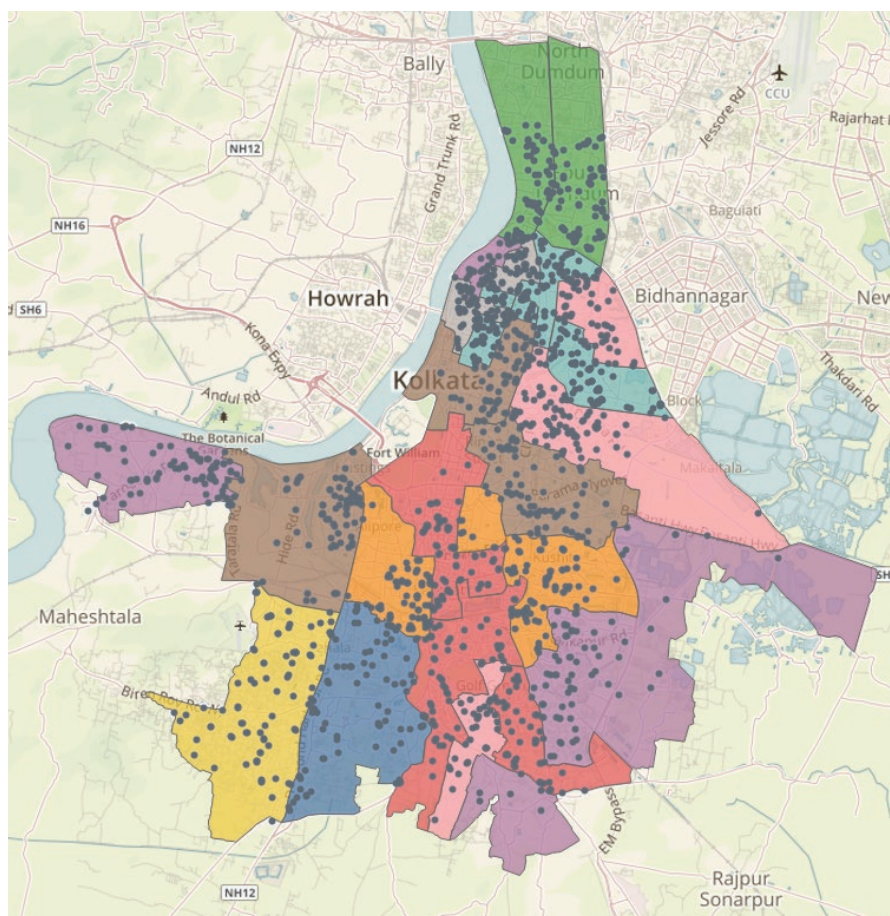
AREA A
Schools - 66
Pop. - 19,947
2019 Spring

AREA B
Schools - 71
Pop. - 19,805
2019 Fall

AREA C
Schools - 97
Pop. - 24,852
2020 Spring

AREA D
Schools - 182
Pop. - 67,276
2020 Fall

AREA E
Schools - 139
Pop. - 48,384
2021 Spring



AREA F
Schools - 153
Pop. - 38,129
2021 Fall

AREA G
Schools - 153
Pop. - 53,585
2022 Spring

AREA H
Schools - 216
Pop. - 64,835
2022 Fall

AREA I
Schools - 93
Pop. - 26,324
2023 Spring

AREA J
Schools - 57
Pop. - 317,465
2023 Fall

	REFINEMENT		PHASE 1		PHASE 2		PHASE 3			
	2019 SPRING	2019 FALL	2020 SPRING	2020 FALL	2021 SPRING	2021 FALL	2022 SPRING	2022 FALL	2023 SPRING	2023 FALL
Area A	Co-funded interventions	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area B	Prep work	Co-funded interventions	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area C	Prep work	Control	Refinement	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area D	Prep work	Control	Control	Refinement	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area E	Prep work	Control	Control	Control	Interventions	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area F	Prep work	Control	Control	Control	Control	Interventions	Ongoing	Ongoing	Ongoing	Ongoing
Area G	Prep work	Control	Control	Control	Control	Control	Interventions	Ongoing	Ongoing	Ongoing
Area H	Prep work	Control	Control	Control	Control	Control	Control	Interventions	Control	Ongoing
Area I	Prep work	Control	Control	Control	Control	Control	Control	Control	Interventions	Ongoing
Area J	Prep work	Control	Control	Control	Control	Control	Control	Control	Control	Interventions
Cumulative Schools	66	137	234	416	555	708	861	1077	1170	1227
Cumulative Students	19,947	39,752	64,604	131,880	180,264	218,393	271,978	336,813	363,137	380,602

*Number of schools and students per geographic area are subject to change and cumulative totals are subject to change.



Splash Hygiene Club members leading recurring handwashing training sessions.

ETHIOPIA



ADDIS ABABA

Ethiopia, with 105 million people, is the second largest country in Africa and the twelfth largest country in the world by population. Some 50% of the national population is under age 18. Addis Ababa is the capital city, with approximately 4 million people. Diarrheal disease and respiratory infections account for approximately 36% of deaths among children aged 5-14 in Ethiopia, indicating a need for improved water, sanitation and hygiene.

Amidst rapid growth and insufficient infrastructure for the urban poor, the primary challenges faced by schools in Addis Ababa include water scarcity, inconsistent electricity supply, and limited availability of manufactured goods, including water filtration systems and spare parts, available on the local market.

BY THE NUMBERS

450 SCHOOLS

450,000 STUDENTS

6% of schools had reliable sources of water and **10%** of schools had soap at handwashing stations.

57% of girls' toilets had lockable doors, and only **7%** had any water for flushing or cleaning.

For boys' toilets, only **51%** had locks, and only **1%** had water for flushing or cleaning.

86% of girl toilets had no facilities for menstrual hygiene management.

42% of students reported being unable to use the toilet during school at all due to unhygienic conditions.

Project WISE: 2019-2023

IMPLEMENTATION & EVALUATION PLAN: ADDIS ABABA

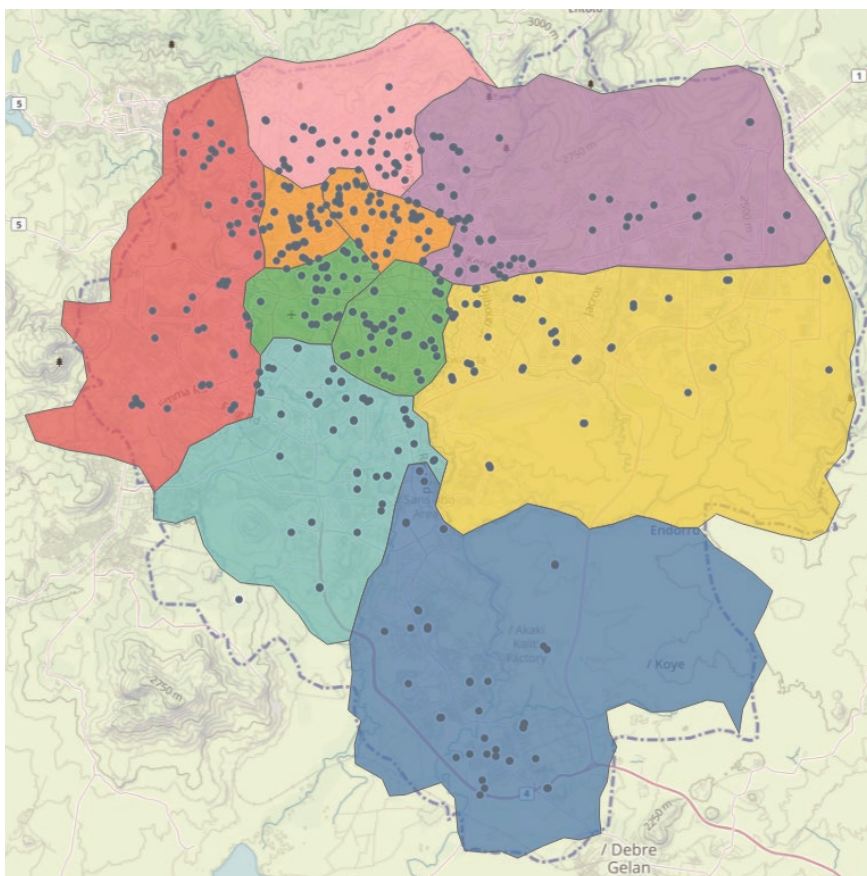


AREA A
Schools - 48
Pop. - 49,184
2019 Fall

AREA B
Schools - 75
Pop. - 49,184
2020 Spring

AREA C
Schools - 90
Pop. - 65,753
2020 Fall

AREA D
Schools - 42
Pop. - 47,904
2021 Spring



AREA E
Schools - 47
Pop. - 47,904
2021 Fall

AREA F
Schools - 62
Pop. - 61,805
2022 Spring

AREA G
Schools - 46
Pop. - 54,833
2022 Fall

AREA H
Schools - 43
Pop. - 39,121
2023 Spring

		REFINEMENT PHASE		PHASE 1		PHASE 2		PHASE 3		
	SPRING 2020	2019 FALL	2020 SPRING	2020 FALL	2021 SPRING	2021 FALL	2022 SPRING	2022 FALL	2023 SPRING	2023 FALL
Area A	Prep work	Refinement	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area B	Prep work	Control	Refinement	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area C	Prep work	Control	Control	Interventions	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area D	Prep work	Control	Control	Control	Interventions	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
Area E	Prep work	Control	Control	Control	Control	Interventions	Ongoing	Ongoing	Ongoing	Ongoing
Area F	Prep work	Control	Control	Control	Control	Control	Interventions	Ongoing	Ongoing	Ongoing
Area G	Prep work	Control	Control	Control	Control	Control	Control	Interventions	Ongoing	Ongoing
Area H	Prep work	Control	Control	Control	Control	Control	Control	Control	Interventions	Ongoing
Cumulative Schools		48	123	213	255	302	364	410	453	453
Cumulative Students		40,156	89,340	155,093	202,997	287,000	348,805	403,638	442,759	442,759

*Number of schools and students per geographic area are subject to change and cumulative totals are subject to change.

Project WISE: 2019-2023

SCHOOL IMPLEMENTATION SCHEDULE V1



INITIATION

Planning

Splash collaborates with local government to determine the target school sites for the upcoming time period

Site Engagement

Splash hosts group-based meetings with school leadership and government representatives to discuss the Splash program and partnership process

Partnership Agreement

Schools must agree to partner with Splash. They sign statements of partnership, articulating the multi-year commitments of both parties

Pre-Implementation Survey

Splash visits the school site to conduct a pre-implementation survey and water quality test

Technical Walk Through and Infrastructure Planning

Splash visits each school to create a consulted and customized infrastructure plan for the school depending upon current conditions and space constraints

DEPLOYMENT AND MEASUREMENT

Meet with School Leadership

Leadership training on WASH, Splash's program and the school contributions

Hygiene and Menstrual Health Behavior Change Programs

Splash convenes focal teachers from schools to be trained in the Splash programs. After the training, focal teachers are responsible for the following activities at their school:

- training child club(s)
- facilitating soap drive
- orienting other teachers

Water

- filter system
- drinking stations
- water storage

Sanitation

- toilet rehab and/or construction
- girl-friendly infrastructure

Hygiene

- handwashing stations
- behavioral nudges

Inauguration

School hosts inauguration ceremony to celebrate the improved WASH infrastructure and present the members of the child club and focal teachers

Maintenance and Cleanliness Orientation

Splash trains at least one individual per school to maintain the filter, as well as janitors to keep the infrastructure clean

Post-Implementation Survey

Splash visits the school to conduct a post-implementation survey and water quality test

TRANSITION AND VALIDATION

Infrastructure Maintenance

Annual replacement of consumable parts and repairing broken components for three years after signing the partnership agreement

Site Sustainability Support

Splash visits the school at regular intervals to identify challenges and provide support for three years after signing the partnership agreement

Ongoing Behavior Change Support

Reach students and the school community through tailored and continuous BC messages. Support yearly formation of child clubs and soap drives. In addition, implement specific activities:

- **Celebration Event:** Event to celebrate the schools, teachers, and students who have excelled
- **Global Event Days:** Mass education sessions aligned with globally celebrated WASH events
- **Refresher Training:** Targeted curriculum for focal teachers based on routine monitoring results

Graduation

Schools graduate from Splash support three years after the partnership agreement is signed

Routine Monitoring

Splash visits the site once per school year for five years to collect data on the condition of WASH infrastructure and programming

Project WISE: 2019-2023

SCHOOL IMPLEMENTATION SCHEDULE V2



INITIATION

Planning

Splash collaborates with local government to determine the target school sites for the upcoming time period

Site Engagement

Splash hosts group-based meetings with school leadership and government representatives to discuss the Splash program and partnership process

Partnership Agreement

Schools must agree to partner with Splash. They sign statements of partnership, articulating the multi-year commitments of both parties

Pre-Implementation Survey

Splash visits the school site to conduct a pre-implementation survey and water quality test

Technical Walk Through and Infrastructure Planning

Splash visits each school to create a consulted and customized infrastructure plan for the school depending upon current conditions and space constraints

DEPLOYMENT AND MEASUREMENT

Meet with School Leadership

Leadership training on WASH, Splash's program and the school contributions

Hygiene and Menstrual Health Behavior Change Programs

Splash convenes focal teachers from schools to be trained in the Splash programs. After the training, focal teachers are responsible for the following activities at their school:

- training child club(s)
- facilitating soap drive
- orienting other teachers

Installation



Water

- filter system
- drinking stations
- water storage



Sanitation

- toilet rehab and/or construction
- girl-friendly infrastructure
- water storage



Hygiene

- handwashing stations
- behavioral nudges
- water storage

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School hosts inauguration ceremony to celebrate the improved WASH infrastructure and present the members of the child club and focal teachers

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Splash trains at least one individual per school to maintain the filter, as well as janitors to keep the infrastructure clean

Post-Implementation Survey

Splash visits the school to conduct a post-implementation survey and water quality test

TRANSITION AND VALIDATION

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Splash visits the school at regular intervals to identify challenges and provide support for three years after signing the partnership agreement

Infrastructure Maintenance

Annual replacement of consumable parts and repairing broken components for three years after signing the partnership agreement

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Reach students and the school community through tailored and continuous BC messages. Support yearly formation of child clubs and soap drives. In addition, implement specific activities:

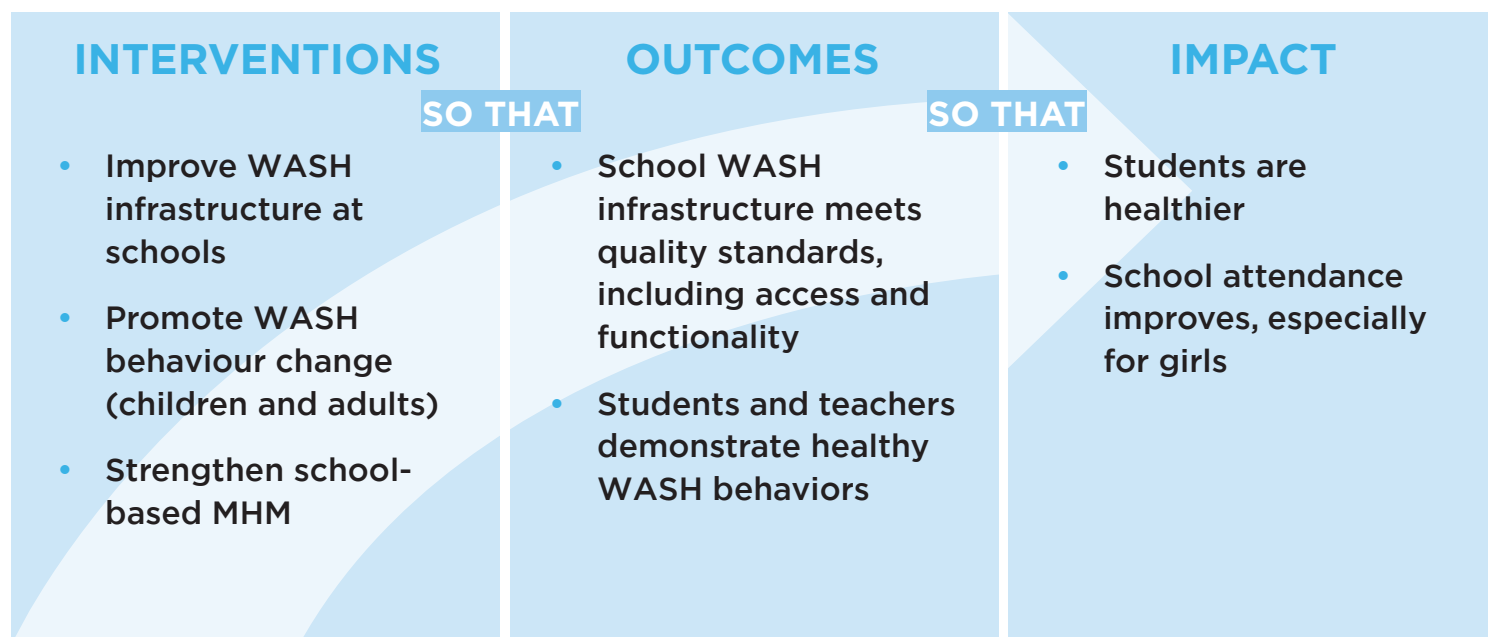
- **Celebration Event:** Event to celebrate the schools, teachers, and students who have excelled
- **Global Event Days:** Mass education sessions aligned with globally celebrated WASH events
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Graduation

Schools graduate from Splash support three years after the partnership agreement is signed

Routine Monitoring

Splash visits the site once per school year for five years to collect data on the condition of WASH infrastructure and programming



CROSS-CUTTING STRATEGIES

- Foster sustainability through local ownership by schools and governments
- Lay foundation for replication in other cities through delivery and promotion of a cost-effective model

Overall goal: Scale a high-quality WASH programme in Addis Ababa and Kolkata public schools to Improve the health and development of children.

Impact: The London School of Hygiene & Tropical Medicine will be conducting an external evaluation to assess the project's effectiveness in reducing the incidence of diarrhea and reducing school absenteeism, especially among adolescent girls. The project aims for 12% and 10% measurable reductions, respectively.

At the same time, Splash will conduct our own evaluation in alignment with our regular routine monitoring efforts (*see Annex 4 for more information*), to measure the following key performance indicators.

- 100% of schools provide advanced water, sanitation, and hygiene services
- 100% meet water quality standards (verified through a field-testing tool)
- 40% of children wash both hands with soap and water after using toilet and before eating
- 65% of sanitation facilities meet standards on cleanliness, proper use, and maintenance
- 100% of schools provide MHM services to girls age 10 and above
- A scalable and cost-effective WINS model optimized by 2021
- Completed infrastructure and initial behavior change in 30% of schools by 12/2021 and 100% by 12/2023
- 10% of schools handed over to government by 12/2022 and 50% by 12/2023

Overall goal: Scale a high-quality WASH programme in Addis Ababa and Kolkata public schools to Improve the health and development of children.

Impact [to be measured by London School of Hygiene and Tropical Medicine]:

- Students are healthier
- School attendance improves, especially for girls

INTERVENTION AREA 1: HARDWARE

Objective: Improve WASH infrastructure to provide children with access to safe water, handwashing facilities, and sanitation facilities in government schools across Addis Ababa and Kolkata by 2024

ACTIVITIES	INPUTS	OUTPUTS
Install site-appropriate water purification systems and accessories.	<ul style="list-style-type: none"> • Government permission • Splash staff time • Local plumber/contractor time • School leadership permission and time • Water filtration equipment and necessary plumbing parts • Water quality tests • Warehousing/Transport 	<p>Water filtration systems installed at all intervention schools</p> <ul style="list-style-type: none"> • Pre-intervention testing of water quality • Water filtration systems installed • Post-intervention testing of water quality • Regular testing of water quality
Ensure sufficient water storage at each site.	<ul style="list-style-type: none"> • Government permission • Splash staff time • Local plumber/contractor time • School leadership permission and time • Water storage tanks and necessary plumbing parts 	<p>All intervention schools have water storage capacity meet necessary standards</p> <ul style="list-style-type: none"> • Pre-intervention assessment of water storage volume • Water storage capacity deficits corrected through use of water storage tanks • Post-intervention assessment of water storage volume • Ongoing assessment of water storage volume
Install designated drinking water stations and taps.	<ul style="list-style-type: none"> • Government permission • Splash staff time • Local plumber/contractor time • Supply chain for Splash water stations and drinking taps (bubblers and bottle fillers) • School leadership permission and time • Necessary plumbing parts 	<p>Adequate drinking water stations with drinking taps such that all intervention schools meet sufficient tap-to-person ratios have been installed</p> <ul style="list-style-type: none"> • Pre-intervention assessment of functional drinking water tap availability • Designated drinking water stations with drinking taps and bottle fillers installed • Post-intervention assessment of functional drinking water tap availability • Ongoing assessment of functional drinking water tap availability
Install designated handwashing stations and taps.	<ul style="list-style-type: none"> • Government permission • Splash staff time • Local plumber/contractor time • Supply chain for Splash water stations and handwashing taps • School leadership permission and time • Necessary plumbing parts 	<p>Install adequate handwashing stations with taps such that all intervention schools meet sufficient tap-to-person ratios</p> <ul style="list-style-type: none"> • Pre-intervention assessment of functional handwashing tap availability • Designated handwashing stations with taps installed • Post-intervention assessment of functional handwashing tap availability • Ongoing assessment of functional handwashing tap availability

ACTIVITIES	INPUTS	OUTPUTS
Rehab existing and/or construct new toilet facilities in order to ensure clean, safe, and child-friendly sanitation facilities.	<ul style="list-style-type: none"> • Government permission • Splash staff time • Local plumber/contractor time • Necessary parts/products for new construction 	<ul style="list-style-type: none"> • All intervention schools have <ul style="list-style-type: none"> - Gender-segregated toilets - Separate teacher toilets (important so that teachers don't lock student bathrooms for their use only) - Toilet facilities for children in wheelchairs • All intervention schools meet stall to student and urinal to student standards • All sanitation facilities have <ul style="list-style-type: none"> - Water available for flushing and cleansing - Doors that close and lock from the inside - Adequate lighting and ventilation

Splash Measured Outcomes for Intervention Area 1:

School WASH infrastructure meets quality standards, including access and functionality

- All intervention schools have functional water filtration systems
- All intervention schools have microbiologically safe water supply [e.g. post-implementation and routine water quality tests are negative for E. coli]
- All intervention schools have regular drinking water availability [at least 80% taps connected to filter at site are in use, accessible to children, functional, water flowing]
- All intervention schools have regular handwashing water availability [at least 80% of taps are in use, accessible to children, functional, water flowing]
- All intervention schools have functional sanitation facilities [at least 80% of toilet stalls and urinal spaces meet sanitation standards]

INTERVENTION AREA 2: BEHAVIOUR CHANGE

Objective: Implement behaviour change programmes in all Addis Ababa and Kolkata public schools by 2024 to ensure that children have and use clean water, clean hands, and clean toilets

ACTIVITIES	INPUTS	OUTPUTS
Initiate and support a multi-faceted behavior change program that helps children to adopt hygienic practices including drinking safe water, handwashing with soap and proper use of toilet facilities.	<ul style="list-style-type: none">• Government permission• Splash staff time• Resources required for trainings (i.e. venue, stipends, transport, materials)• Teaching tools and hygiene club supplies	<ul style="list-style-type: none">• In the first year of intervention at each site, all schools complete the following:<ul style="list-style-type: none">- 2 teachers trained- 1 Hygiene Club formed- 20-30 hygiene club members trained- 1 Teacher orientation- 1 School leadership orientation- 1 soap drive• In years 2-5 of intervention at each site, all schools can assure:<ul style="list-style-type: none">- WASH curriculum included in classes as defined per teacher training- Monthly hygiene club meetings and daily monitoring of handwashing stations- Soap supplies regularly restocked; soap is available
Install behavioral “nudges” that cue subconscious triggers to promote use of WASH infrastructure, such as eye-catching posters and installing mirrors at handwashing stations	<ul style="list-style-type: none">• Government permission• Splash staff time (for design as well as implementation)• Local plumber/contractor time (if necessary)• Equipment and supplies	<ul style="list-style-type: none">• Mirrors installed at handwashing stations• Posters installed at handwashing stations and drinking stations• Others TBD

Splash Measured Outcomes for Intervention Area 2:

Students and staff demonstrate healthy WASH behaviors

- Less than 30% of children per site observed drinking unsafe water
- At least 40% of children at each intervention school wash both hands with soap and water after using the toilet/before eating
- At least 65% of sanitation facilities at each intervention school meet cleanliness standard, demonstrating proper use and maintenance

INTERVENTION AREA 3: MHM

Objective: Strengthen school based MHM services

ACTIVITIES	INPUTS	OUTPUTS
Conduct barrier analysis to inform strengthened MHM program design in Addis Ababa and Kolkata	<ul style="list-style-type: none"> Splash staff or consultant time (MHM specialist) Permission from schools/govt for interviews and focus groups 	<ul style="list-style-type: none"> School-MHM barrier analysis for Kolkata School-MHM barrier analysis for Addis Ababa
Improve school sanitation facilities with special provisions to meet the needs of menstruating girls	<ul style="list-style-type: none"> Government permission Splash staff time School staff time Physical materials needed for sanitation improvements/construction 	<p>Girl friendly sanitation facilities at all primary and secondary schools:</p> <ul style="list-style-type: none"> Strong, durable doors with locks ensure privacy Adequate lighting within the stall and hallway of the toilet block Water tap with small bucket within every toilet stall Trash/waste bin within every toilet stall
<p>Deliver targeted MHM behaviour change interventions, including:</p> <ul style="list-style-type: none"> Education session on puberty and menstruation for all children (boys and girls) over the age of 10 Q&A session and demonstration of products for girls only Facilitate school-based celebration of Menstrual Hygiene Day (May 28th) <p>Optimize MHM software approach based on results of barrier analysis and ongoing formative research</p>	<ul style="list-style-type: none"> Government permission Splash staff time School staff time Behavior change curriculum and materials 	<ul style="list-style-type: none"> Teachers at primary and secondary schools trained on MHM curriculum MHM curriculum implemented (as part of hygiene module) for hygiene clubs at schools serving students over the age of 10 Schools provided with agenda to support hosting of menstrual hygiene day Splash directly supports menstrual hygiene event day at select schools New program components developed targeting improved MHM services and/or girls' experiences at schools (TBD based on barrier analysis and formative research – examples could include: new training modules for students or teachers; identifying MHM resource specialists within each school; addressing pain management or product availability needs at school level, etc.)

Splash Measured Outcomes for Intervention Area 3:

Girls have increased awareness of MHM and access to necessary facilities at school

- At least 80% of female toilet stalls (per site) serving girls 10 and above address MHM needs
- Additional MHM outcome(s) (related to software programme components targeting girls' knowledge and experiences at schools) to be defined by end of 2019 and built into project M&E framework.

CROSS-CUTTING STRATEGY 1: Foster sustainability through local ownership by schools and governments

Objective: Engage school and government stakeholders in building, maintaining, assessing, and supporting WASH infrastructure and programming to achieve scale and maximize sustainability by 2024

ACTIVITIES	INPUTS	OUTPUTS
Train school management and maintenance staff to support the proper maintenance of WASH infrastructure.	<ul style="list-style-type: none"> Government permission Splash staff time School administration, maintenance staff time Production of training materials 	<ul style="list-style-type: none"> Standardized WASH maintenance manual for low-resource schools Training curriculum for staff responsible for WASH maintenance Per school, one training in first year and one additional refresher training
In collaboration with local school and government stakeholders, develop and deploy biennial WASH recognition programmes for headmasters and teachers to commend strong performing schools (note: this is also a behavioural change intervention – shared between BC and Sustainability)	<ul style="list-style-type: none"> Government permission School staff time Splash staff time 	<ul style="list-style-type: none"> Assessment tool to identify strong headmasters and teachers developed Top schools and teachers are identified by Splash Recognition events held Schools and/or teachers receive awards
Promote initial and long-term funding of WASH infrastructure and services by government stakeholders in Kolkata and Addis Ababa	<ul style="list-style-type: none"> Splash leadership and country staff time Splash government advocacy lead (staff member or consultant) Government counterpart time 	<ul style="list-style-type: none"> Co-funding MOUs with government partners negotiated Funding allocations received according to MOU agreement Regular meetings held with government stakeholders Funding allocations for school-based WASH integrated into short- and long-term government plans and budgets
Select, foster, and support government WASH champions to develop effective operations and procedures and standards for supporting school WASH infrastructure and services	<ul style="list-style-type: none"> Splash government advocacy lead (staff member or consultant) Government counterpart time 	<ul style="list-style-type: none"> Government WASH champions selected at relevant government bureaus Regular meetings, events, and conference to support government WASH champions Workshops held to design government WASH operations procedures and standards
Requires co-funding outside of CIFF project to complete: Conduct stakeholder mapping exercise of government & donor landscape to understand government-related WASH decisions and processes	<ul style="list-style-type: none"> Splash staff time School administration and maintenance time Service provider engagement Spare parts procurement Service provider identified for each intervention school (requires funding outside of CIFF project) Service provider network in place for all schools (requires funding outside of CIFF project) 	<ul style="list-style-type: none"> Service provider identified for each intervention school (requires funding outside of CIFF project) Service provider network in place for all schools (requires funding outside of CIFF project)
Requires co-funding outside of CIFF project to complete: Development of effective service provider network/ model for spare parts and routine maintenance of water filter	<ul style="list-style-type: none"> Splash staff time School administration and maintenance time Service provider engagement Spare parts procurement 	<ul style="list-style-type: none"> Service provider identified for each intervention school (requires funding outside of CIFF project) Service provider network in place for all schools (requires funding outside of CIFF project)

Intended Outcomes* for Cross-Cutting Strategy 1:

- Intervention schools demonstrate ongoing, effective maintenance of and support for functional WASH infrastructure and programming
- Intervention school staff demonstrate ongoing commitment to behaviour change activities supporting effective use of WASH infrastructure
- Revised standards for WASH in urban schools approved and implemented by government partners
- Programming for effective school-based WASH incorporated into government WASH and Education plans and budgets beyond 2024

CROSS-CUTTING STRATEGY 2: Lay foundation for replication in other cities through delivery and promotion of a cost-effective model

Objective: Document and disseminate Splash’s urban WASH-in-Schools model for implementers, policy-makers, donors, and decision makers.

ACTIVITIES	INPUTS	OUTPUTS
Requires funding outside of CIFF project to complete: Document all components of Splash model to highlight and promote successful and cost-effective urban school-based WASH programme for audiences in Ethiopia, India, and beyond	<ul style="list-style-type: none">• Splash staff time• Consultant time for urban school WASH life-cycle costing analysis• Intervention school staff time• Writing, editing, production support	<ul style="list-style-type: none">• Completed life cycle cost models for Addis Ababa and Kolkata (requires funding outside of CIFF project)• Splash model (financial, programmatic, school, and government partnerships) documented (required funding outside of CIFF project)• Produce final materials for broad dissemination and advocacy (requires funding outside of CIFF project)
Engage with national and international players to disseminate Splash model	<ul style="list-style-type: none">• Splash staff time• Travel and meeting costs	<ul style="list-style-type: none">• Present Splash model at a variety of key WASH conferences (UNC, World Water Week) and to key sector players (Agenda for Change and others)• Encourage WASH global leaders to advocate for and implement school-based WASH programming according to Splash quality standards

Intended Outcomes* for Cross-Cutting Strategy 2:

- Replication of Splash urban school WASH model has been initiated in new geography

**Not explicitly tracked by Splash through project monitoring framework unless otherwise specified in M&E framework*

This annex outlines the studies and literature reviews that support Splash's approach to water, sanitation, and hygiene (WASH). Each section details a different aspect of our intervention and provides a short literature review, as well as a link to the source documentation. The section on Safe Drinking Water is liberally sourced from a large evidence review by Evidence Action.

SAFE DRINKING WATER

There are two independent strands of literature providing evidence of the health benefits of purifying water. First, a vast epidemiological literature (approximately 50 studies) shows significant reductions on diarrhea from treating water. While specific results vary by study and context, reductions are of the order of 25 percent on average amongst those offered treated water or 40 percent for those who actually filter or treat their water. Second, the economics literature provides several examples of careful studies showing that the expansion of safe water infrastructure reduces child mortality. These studies in combination demonstrate the value of improving water quality.

EPIDEMIOLOGICAL LITERATURE

Four systematic review articles survey and assess the evidence for drinking water quality interventions in developing countries having an impact on child health, particularly diarrheal diseases. Three of them conclude that the health benefits of water quality interventions are clear, but dependent on consistent use, which can be a challenge with some technologies. The fourth concludes that water treatment can be helpful, but does not find improvements from treatment to be statistically significant when adjusting for potential bias from lack of blinding. These reviews focus on “point-of-use” treatment. The reviews include:

[Clasen et al. \(2015\)](#), the most recent Cochrane Review on the topic, includes 55 studies, most of which were conducted in low- or middle-income countries (LMICs) covering over 84,000 participants. Results indicate that improving the microbiological quality of water at the point of use significantly reduces diarrhea, by about a quarter for chlorination and 50 percent for filtration, in the studies reviewed. The review indicates that these impacts hold even in areas with poor sanitation and at improved and unimproved sources of water. The authors caution not to interpret this as meaning that filters are much more effective than chlorination (or vice versa) since these were not compared head-to-head but instead

evaluated in different contexts with different study populations and designs.

The authors conclude that: “Interventions that address the microbial contamination of water at the point-of-use may be important interim measures to improve drinking water quality until homes can be reached with safe, reliable, piped-in water connections. The average estimates of effect for each individual point-of-use intervention generally show important effects.” Sub-group analysis also suggests that effectiveness improves with adherence, so optimizing coverage and long-term usage remain important.

[Waddington et al. \(2009\)](#) a 3ie Review, covers 65 rigorous impact evaluations of water, sanitation and/or hygiene interventions on diarrhea morbidity, covering 71 distinct interventions assessed across 130,000 children in 35 developing countries during the past three decades. It concludes that point-of-use water quality interventions appear to be highly effective – and indeed, more effective than water supply or source treatment in reducing diarrhea – but that this is very sensitive to the ability of the program to sustain high rates of adoption. A product cannot provide health benefits if people don't use it.

[Arnold and Colford \(2007\)](#) conducted a systematic review of all studies that measured diarrheal health impacts in children and the impact on water quality of point-of-use chlorine drinking water treatment. Twenty-one relevant studies were identified and a meta-analysis provided summary estimates of the intervention effect. The intervention reduced the risk of child diarrhea by 29%, and up to 40% if you look at effects only among people actually using the product, as opposed to only being offered it.

In addition, here is some relevant research on the epidemiological impact of clean water on diarrhea:

[Wolf et al. \(2014\)](#) included 61 studies on improved sources or water treatment at home, and 11 studies on sanitation. Overall, improvements in drinking water and sanitation were associated with decreased risks of diarrhea. The authors found that use of water filters and provision of high-quality piped water and sewer connections, were associated with greater reductions in diarrhea compared with other interventions. The authors conclude that: “The results show that inadequate water and sanitation are associated with considerable risks of diarrheal disease and that there are notable differences in illness reduction according to the type of improved water and sanitation implemented.”

[Luby et al. \(2015\)](#) assess the impact of the microbiological quality of water on childhood diarrhea in Bangladesh. 10 households within each of 50 villages were included in the sample across rural Bangladesh. Water samples from households were analyzed to identify the concentration of *Escherichia coli* in drinking water. 59% of the water samples were contaminated with *E. coli*. The study found that *E. coli* contamination was associated with increased childhood diarrhea in the period immediately following testing, showing that improvements in water quality can have significant health benefits.

This is consistent with other studies which suggest that reduced contamination leads to less or less severe intestinal diseases – e.g. [Gruber et al. \(2014\)](#) show that *E. coli* concentrations are positively correlated with diarrhea incidence, and [Mintz et. al. \(1994\)](#) show that salmonella incubation period and severity is strongly correlated with dose of contaminated food consumed.

ECONOMICS LITERATURE

The following papers in the economics literature complement the epidemiology evidence on water quality and add to our understanding of the health impacts (child mortality) of improved water and sanitation. On their own, they show the importance of improved water quality rather than that of point-of-use (PoU) treatment. However, combined with the strong evidence that PoU treatment improves water quality, they make a strong contribution to the case for safe water's impact on health. This is further strengthened by recent evidence on the links between water quality and diarrhea, and evidence showing that many (although not all) of the microbes that cause moderate to severe diarrhea are ones that current treatment is effective against. The studies include:

[Cutler and Miller \(2005\)](#) use historical variation in the timing and location of water filtration and chlorination technology adoption across U.S. cities to identify the contribution of improved water quality to improved public health in U.S. cities. They find that safe water was responsible for about half the observed decline in mortality and nearly two-thirds of the reduction in child mortality in cities.

In a rural setting [Watson \(2006\)](#) analyzes the introduction of various water and sanitation interventions on Native American reservations in the United States from 1960–98. She leverages differences in the size, timing and location of these interventions to isolate the impacts of the program, distinct from other factors affecting infant health. The study suggests that a 10% increase in the fraction of homes with improved water and sanitation services reduced infant mortality by 4%. Infant mortality also fell among local residents not

living on the reservation, and thus without access to the new services—which suggests that there may have been positive externalities associated with the program.

[Galiani, Gertler, and Schargrodsky \(2005\)](#) study a privatization reform in 30% of municipal water companies in Argentina in the 1990s to identify the impact of the expanded coverage with safe water. They estimate that child mortality overall fell 5–7% in areas that privatized their water services because the reform did succeed in expanding coverage with safe water. The effect was largest in the poorest areas, at around 24%, and was not correlated with causes of death unrelated to safe water.

Splash acknowledges that there are typically two critiques voiced with these studies. First, they are not randomized trials, and second, they are far in time, space and specific type of project from modern day treatment. On the first point, while they are not randomized controlled trials, they use careful statistical techniques to identify causal links between water infrastructure improvements and health benefits. Also, especially given reducing childhood mortality, randomized trials on mortality require increasingly large sample sizes and are becoming increasingly expensive. Hence, we will likely have to rely on high quality statistical studies of these kinds to contribute to our best available information on childhood mortality. On the second point, the environments in which these studies were conducted were similar to those in developing countries today in that water was not the only source of disease microbes (e.g. there was often open defecation/incomplete unsafe sanitation, animals in the environment, etc.). Also, the basic biological pathway – reduced contamination leads to reduced disease – remains similar between the two types of programs.

IMPROVED SANITATION

Improved sanitation is critical to WASH program success. Effective sanitation isolates excreta and/ or inactivates the pathogens within feces. As stated by Pruss-Ustun et al. (2008), high-tech solutions are not necessarily the best: some simple latrines can be very effective and interventions that work in rural areas may be very different from those in urban areas. While the majority of sanitation evidence presented herein emphasizes the accompanying health benefits, it should be noted that the importance of sanitation extends beyond health to aspects of privacy, dignity, and safety.

[Fink, Gunther, & Hill \(2011\)](#) conducted an analysis of all 1986–2007 Demographic and Health Surveys (DHS) and revealed access to improved sanitation was associated with lower mortality (OR = 0.77, 95% CI 0.68–0.86), a lower risk of child diarrhea (OR = 0.87, 95% CI

0.85–0.90) and a lower risk of mild or severe stunting (OR = 0.73, 95% CI 0.71–0.75).

[Esrey \(1996\)](#) uses data collected across eight countries (both rural and urban settings) to show not only the health benefits of sanitation improvements, but also that the positive impacts of improved water supply were only realized when improvements to sanitation infrastructure are achieved simultaneously. Furthermore, the beneficial impacts of incremental improvements to sanitation, such as fewer diarrhea incidences and reduced stunting in children, have been found to be greater among urban dwellers than among rural dwellers and the health benefits from sanitation were greater than those for improved water.

[Eisenberg et al. \(2007\)](#) tested a modeling framework designed to capture the interdependent transmission pathways of enteric pathogens and found that the benefits of a water quality intervention depend on sanitation and hygiene conditions. When sanitation conditions are poor, water quality improvements may have minimal impact regardless of the amount of water contamination.

While point of use water treatment has proven highly effective in reducing diarrhea (above, [Waddington et al. \(2009\)](#)) further review of the same evidence suggests hygiene interventions (namely provision of soap for hand-washing) and sanitation hardware interventions are also highly effective in reducing diarrhea morbidity and maintain better compliance over time. It must be highlighted, however, that there are few such evaluations examining multiple interventions, and the results available rely mainly on indirect comparisons of interventions across different studies. [Esrey et al. \(1991\)](#) and [Hutley et al. \(1997\)](#) both concluded that improved hygiene and sanitation have more impact than drinking water quality on health outcomes (specifically reductions in diarrhea, parasitic infections, morbidity and mortality, and increases in child growth); however, there remains a notable gap in the primary evidence looking across multiple interventions.

HEALTHY HYGIENE BEHAVIORS

The combination of hygiene programs with safe drinking water and sanitation improvements is particularly important for better health outcomes.

[Luby et al. \(2004\)](#) conducted a cluster randomized control trial of 36 low-income neighborhoods in urban settlements in Karachi, Pakistan and found that children younger than 15 living in households where soap is available, and handwashing was actively promoted in the neighborhood had a 53% lower incidence of diarrhea,

compared to children living in control households. The effectiveness of soap in preventing diarrhea was independent of children's nutritional status. The overall level of reduction in longitudinal prevalence of diarrhea among children in households with handwashing promotion was remarkably close to the 47% decrease calculated in a meta-analysis conducted by [Cur](#)

[tis and Cairncross \(2003\)](#) on the effect of handwashing in preventing diarrhea. Households from the Karachi study were reevaluated years later and it was found by [Bowen et al. \(2013\)](#) that five years after receiving handwashing promotion, intervention households were more likely to have soap at the household handwashing station, know key times to wash hands and report purchasing more soap than controls, suggesting habituation of improved handwashing practices in this population.

[Freeman et al. \(2014\)](#) reviewed studies with data on observed rates of handwashing with soap published between 1990 and 2013 and determined through meta-regression of risk that handwashing reduces the risk of diarrheal disease by 23% (risk ratio 0.77; 95% CI: 0.32–1.86) after adjusting for un-blinded studies (the reduction rate was 40% when the study was not adjusted for unblinded studies). The same analysis estimates that less than 19% of the world population washes hands with soap after contact with excreta (i.e. use of a sanitation facility or contact with children's excreta).

Handwashing also reduces the rate of respiratory infections by removing respiratory pathogens from hands, thereby stopping them from entering the body or passing them on to others. A meta-analysis of hand-hygiene trials from 1960 through 2007, conducted by [Aiello et al. \(2008\)](#), suggests that improving hand hygiene can prevent respiratory illness by 21%. The same analysis identified a 31% prevention of gastrointestinal illness and found little evidence for an additional impact of new products, such as alcohol-based hand sanitizers or antibacterial soaps compared with non-antibacterial soaps, for reducing either gastrointestinal or respiratory infectious illness symptoms.

WASH IN SCHOOLS

A study by [Dreibelbis et al. \(2014\)](#) highlights that school WASH interventions have been associated with improvements in educational outcomes and reductions in illness and diarrhea among school-aged children. A school WASH study in Kenya by [O'Reilly et al. \(2007\)](#) also concludes that school children are ready, reachable, and important target[s] for health intervention. The same evaluation also demonstrates

water treatment and hygiene knowledge transfer from student to parent and some evidence of behavior change among parents. From baseline to final evaluation, improvement was seen in students' knowledge of correct water treatment procedure (21–65%, $P < 0.01$) and knowing when to wash their hands. At final evaluation, 14% of parents reported currently treating their water, compared with 6% at baseline ($P < 0.01$).

Handwashing promotion programs have shown to be particularly impactful in school environments, as shown by a cluster-randomized controlled trial, evaluating the effect of a handwashing-promotion program in Chinese primary schools. The intent was to determine whether or not schools can be used as a scalable intervention to improve health whereby many students are reached at once (opposed to via repeated household visits). [Bowen et al. \(2007\)](#) compared student illness (focusing on ten symptoms or signs of illness) during five months of observation at 87 public primary schools in Fujian Province. The study resulted in decreased rates of illness and absence among schools that received hygiene promotion. The intervention schools, which enlisted student handwashing champions and received soap in addition to a standard handwashing promotion program, reported 54% fewer days of absence and 71% fewer in-class illnesses. The study also emphasized that because children have been recognized as important vectors for infectious illness in the community, handwashing among children has particularly important public-health implications.

Disrupting poor habits is an important part of changing handwashing behavior at schools. Providing proper infrastructure access and teaching a person to wash his/her hands with soap has not proven to be enough to prompt sustained hygiene behavior change. As discussed by [Neal et al. \(2015\)](#), interventions must merge the best evidence-based approaches that leverage both reflective drivers (i.e. knowledge, norms, and emotions) and reflexive drivers (i.e. habits). An example of this can be seen in handwashing “nudges.” A twenty school cluster-randomized trial was recently conducted in rural Bangladesh by [Grover et al. \(2018\)](#) to compare the effects of high intensity health education and nudges, an expansion to a similar two-school study that was previously conducted in Bangladesh by [Dreibelbis et al. \(2016\)](#). Both studies found nudges to be effective in increasing handwashing with soap after toilet use, and the most recent study found no statistically significant difference between the hygiene education program and the nudge intervention.

As previously indicated by [O'Reilly et al. \(2008\)](#), evidence suggests that comprehensive WASH services at schools can have ripple effects on households whereby students act as change-agents and influence the WASH practices of their classmates, siblings and parents. [Rohde and Sadjilmin \(1980\)](#) discuss evidence

of children motivating classmates to alter their behavior. [Nicholson et al. \(2014\)](#) conclude that direct-contact hand washing interventions aimed at younger school-aged children can affect the health of the whole family. Through this cluster-randomized, controlled study in urban low-income communities in Mumbai, five-year-old children were the principal targets of handwashing interventions because of their responsiveness to handwashing behavior change messages and their status as possible change agents within the family. The intervention included stories, songs, and poems shared by hygiene promoters during weekly after-school classroom visits. Promoters also visited homes and shared information with mothers through parent meetings, however the emphasis was placed on targeting children.

The results indicate that the intervention reduced episodes of diarrhea and acute respiratory infections for target 5-year-olds and their families. There were also fewer absences from school due to illness for the 5-year-olds. Secondary analyses suggest that the intervention also reduced eye infections among the 5-year-olds. [Dreibelbis et al. \(2014\)](#) examined the impact of school WASH interventions on diarrhea-related outcomes among younger siblings of school-going children and concluded that in water-scarce areas, school WASH interventions that include robust water supply improvements can reduce diarrheal diseases among young children whose siblings attend intervention schools.

Finally, although several studies, including the [Bowen](#) and [Nicholson](#) studies above, point to a decrease in absences due to handwashing promotion, it should be noted that school absenteeism is very difficult to study at scale and to isolate increased attendance causation specifically tied to WASH interventions. Existing evidence on this topic is somewhat inconclusive. [Freeman et al. \(2012\)](#) assessed the impact of school-based WASH on pupil absence through a cluster-randomized trial in Nyanza Province, Kenya and found no overall effect of the intervention on absence. However, intervention compliance was low during this study and contextual factors such as post-election violence were at play. Among schools in two of the areas not affected by post-election violence, those that received water treatment and hygiene promotion showed a 58% reduction in the odds of absence for girls (OR 0.42, CI 0.21–0.85) and sanitation improvement combined with water treatment and hygiene promotion resulted in a comparable drop in absence, although results were marginally significant (OR 0.47, 0.21–1.05). Boys were not impacted by the intervention. The previously cited study by [O'Reilly](#) does show a 35% decrease in school absenteeism during a three-month term in nine schools.

LEVEL	WHAT DO WE WANT TO KNOW?	HOW DO WE KNOW?	WHEN?	WHO IS THE INFO FOR?
Health Impact	Are children healthier due to effective, school-based WASH programmes?	External evaluation study	2023	Community beneficiaries of programme; local implementing partners; Ethiopian, Indian, and other government health and education ministries; national & international WASH agencies and influencers; donors
School Attendance Impact	Does attendance improve among children (especially girls) in schools with effective WASH programmes?	External evaluation study	2023	Community beneficiaries of programme; local implementing partners; Ethiopian, Indian, and other government health and education ministries; national & international WASH agencies and influencers; donors

SPLASH-MEASURED INTERVENTION OUTCOMES

Hardware Outcome	Is high quality WASH infrastructure effectively installed and maintained in urban schools in Addis Ababa and Kolkata?	Regular Splash monitoring: <ul style="list-style-type: none"> • 100% water filtration systems function at each site • 100% drinking water is microbiologically safe at each site • 80% Splash drinking water stations per site function as defined • 80% handwashing stations per site function as defined • 80% sanitation facilities (toilet stalls + urinal spaces) per site function according to defined standards 	Mid-project (2021) through 2023	Local implementing partners (schools, government counterparts, private sector partners); Ethiopian, Indian, and other government health and education ministries; national and international WASH agencies and influencers; donors
Behaviour Change Outcome	Do students and teachers in urban schools in Addis Ababa and Kolkata demonstrate healthy WASH behaviours?	Regular Splash monitoring: <ul style="list-style-type: none"> • Less than 30% of children per site observed drinking unsafe water • At least 40% of children per site wash both hands with soap and water after using the toilet/ before eating • At least 65% of sanitation facilities (toilet stalls + urinal spaces) per site are found to be clean according to defined standards 	Mid-project (2021) through 2023	Local implementing partners (schools, government counterparts, private sector partners); Ethiopian Indian, and other government health and education ministries; national and international WASH agencies and influencers; donors
MHM Outcome	Do girls aged 10 and above in urban schools in Addis Ababa have access to MHM-friendly hygiene facilities and are they able to manage their menstruation-related needs (physical, emotional, mental) while at school?	Regular Splash monitoring to assess whether at least 80% of female toilet stalls (per site) serving girls 10 and above address MHM needs Additional MHM outcome(s) (related to software programme components targeting girls' knowledge and experiences at schools) to be defined by end of 2019 and built into project M&E framework.	Mid-project (2021) through 2023	Local implementing partners (schools, government counterparts, private sector partners); Ethiopian, Indian, and other government health and education ministries; national and international WASH agencies and influencers; donors

LEVEL	WHAT DO WE WANT TO KNOW?	HOW DO WE KNOW?	WHEN?	WHO IS THE INFO FOR?
SPLASH-MEASURED INTERVENTION OUTPUTS				
Hardware Output	Are water filtration systems installed according to project timeline?	Splash implementation records; before/after photos; Barcode/QR code tracking - all codes will link to specific infrastructure within an asset management system	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Hardware Output	Is sufficient water storage capacity assured according to project timeline?	Splash implementation records; before/after photos	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Hardware Output	Are drinking water stations and taps installed according to project timeline?	Splash implementation records; before/after photos; Barcode/QR code tracking - all codes will link to specific infrastructure within an asset management system	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Hardware Output	Are handwashing stations and taps installed according to project timeline?	Splash implementation records; before/after photos; Barcode/QR code tracking - all codes will link to specific infrastructure within an asset management system	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Hardware Output	Are toilet facilities upgraded to be clean, safe, and child-friendly according to project timeline?	Splash implementation records; before/after photos Barcode/QR code tracking of toilet blocks- all codes will link to specific infrastructure within an asset management system	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Behaviour Change Output	Has behaviour change programme been implemented in intervention schools according to project timeline?	Splash implementation records; <ul style="list-style-type: none"> Focal teachers trained Hygiene clubs formed, trained Soap procured at each site (soap drive or other method) 	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Behaviour Change Output	Have behavioural nudges been installed according to project timeline?	Splash implementation records; before/after photos	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Behaviour Change/ Sustainability Output	Has school maintenance staff been trained in WASH maintenance according to project timeline?	Splash implementation records	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
Behaviour Change/ Sustainability Output	Has a WASH recognition programme been established and high-performing schools been selected and recognized?	Splash implementation records	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
MHM Output	Have toilet facilities in schools that serve girls aged 10 and above been upgraded to meet MHM standards (privacy, lighting, water, waste disposal) according to project timeline??	Splash implementation records; before/after photos Barcode/QR code tracking of toilet blocks All codes will link to specific infrastructure within an asset management system	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors

LEVEL	WHAT DO WE WANT TO KNOW?	HOW DO WE KNOW?	WHEN?	WHO IS THE INFO FOR?
MHM Output	Has an MHM behaviour change programme been implemented at intervention schools serving girls aged 10 and above according to project timeline?	Splash implementation records: <ul style="list-style-type: none"> • Focal teachers trained and engaged • MHM curriculum implemented • MHM education, Q&A sessions held • All schools provided with agenda to support hosting of menstrual hygiene day • Splash directly supports menstrual hygiene event day at select schools 	2020-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management, donors
MHM Output	Have barrier analyses to inform MHM programme design been conducted according to project timeline?	Splash project documentation	2020	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management; donors
MHM Output	Has Splash's MHM behaviour change programme been revised and optimized based on barrier analyses and project experience?	Splash project documentation	2021-2023	Local implementing partners (schools, government counterparts, private sector partners); Splash programme management; donors

INTENDED CROSS-CUTTING OUTCOMES

Cross-cutting Outcome: Sustainability	Do Addis Ababa and Kolkata school and government partners sustainably fund, maintain, and champion school-based WASH programming?	Splash tracks school maintenance and administrative staff performance and commitment re WASH programming through assessing 1) signing of MOUs and allocation of school contributions to programme; 2) ongoing cleanliness and functionality of school WASH infrastructure; 3) adherence to school-based behaviour change programmes. Splash and CIFF will also track government policy changes, programming plans, and funding commitments re WASH programming in schools	2023 and beyond	Community beneficiaries of programme; School staff and leadership; Government health and education ministries; national and international WASH agencies and influencers; donors
Cross-cutting Outcome: Replication	Do demonstration, documentation, and promotion of a cost-effective urban school-based WASH programme lead to replication in other cities?	CIFF and Splash engage with national and international WASH stakeholders to support and track replication of Splash urban school model	2023 and beyond	Government health and education ministries; national and international WASH agencies and influencers; donors

INTENDED CROSS-CUTTING OUTPUTS

Government Sustainability Output	Have local governments allocated funding to school-based WASH programming as outlined in project MOUs?	Splash project documentation	2019-2023	Addis Ababa and Kolkata government stakeholders; Splash programme management, donors
Government Sustainability Output	Do Splash staff or consultants meet regularly with key government stakeholders to discuss and promote effective urban school WASH programming and standards?	Splash project documentation	2021-2023	Addis Ababa and Kolkata government stakeholders; Splash programme management, donors

LEVEL	WHAT DO WE WANT TO KNOW?	HOW DO WE KNOW?	WHEN?	WHO IS THE INFO FOR?
Replication Output	Has Splash's broad experience in implementing school-based WASH in Addis Ababa and Kolkata been documented and disseminated?	Splash project documentation	2023	Addis Ababa and Kolkata government stakeholders; Splash programme management, donors
Replication Output	Has the Splash model and Addis/Kolkata experience been presented at key WASH conferences, organisations?	Splash project documentation	2023	Addis Ababa and Kolkata government stakeholders; international WASH stakeholders, Splash programme management, donors
Replication Output	Has encouragement and support been provided to WASH global leaders considering implementing the Splash model?	Splash project documentation	2023	Addis Ababa and Kolkata government stakeholders; international WASH stakeholders, Splash programme management, donors