

Improving WASH programming through evidence-building

This brief highlights how evidence from a large-scale Water, Sanitation, and Hygiene (WASH) study in 14 countries will improve World Vision's WASH programming.

➤ OVERVIEW

In the largest evaluation of water, sanitation, and hygiene (WASH) programming to date, World Vision (WV) and the University of North Carolina Water Institute (WI) partnered together to assess over 36,000 households, 2,532 water points, 2,691 schools, and 2,035 healthcare facilities in 14 countries. The study, completed in 2017, aimed to: 1) survey the state of WASH in 14 countries using sustainable development WASH indicators and 2) assess the status of WASH in WV program areas compared to non-WV program areas in these countries. Though this study did not analyze specific WV interventions, the findings provide a snapshot of WASH access around the world and can help determine whether or not WV programming is consistently effective in improving the quality and sustainability of WASH systems. The value of the study is on changing the WASH measures from "basic" services to measuring SDG-type of indicators.

Study design

This was a stratified cluster randomized study with samples drawn from 56 randomly selected clusters in WV area programs and 56 in comparison areas. Using a harmonized study design intended to

ensure that results could be compared across countries, WV and WI conducted household surveys, water point surveys, community surveys, healthcare facility surveys, school surveys, and key informant interviews. Within each cluster, researchers studied a wide range of WASH domains, including sanitation, hand washing, menstrual hygiene management, and water quality.

Interventions

WV has been implementing WASH programming in these countries for a number of years. While this study did not test the outcomes of specific WV WASH interventions, general World Vision WASH programming includes: providing basic water access with an increased focus on delivering water closer to home and maintaining high water quality; using community approaches to increase access to sanitation and promote hygiene in households; providing basic WASH services to schools and health care facilities; and community empowerment, advocacy, and faith and development components. The WV WASH programming is not a one-size-fits-all approach but contextualized for each location.

➤ SURVEY RESULTS

Overall, the global WASH survey established that while there are specific domains where WASH access is prevalent, serious gaps exist, particularly with respect to sanitation access at healthcare facilities and in schools. The domain where the population is doing the best is household access to water services. Across every surveyed household (WV programs and comparison areas), 61% of households had at least basic water services, and 31% had water quality aligned with WHO guidelines on E. coli in drinking water. Only 14% of households had basic hand hygiene facilities, but 70% of those homes did have access to soap. About 51% of surveyed healthcare facilities (HCFs) had access to basic water services. Less than 1% of HCFs met the criteria for basic sanitation services, meaning having at least one toilet dedicated for staff, one gender appropriate toilet with menstrual hygiene facilities, and one toilet accessible for people with limited mobility.

The figures were similar for schools, with 51% having basic, on-premise water services. Only 12% of schools had a basic handwashing facility, and 26% had menstrual hygiene management materials available. These figures support WV's investment in hygiene and sanitation in WASH programming. With a clearer global picture of what the WASH needs are in different countries, WV can better design its programs to be more effective.

WASH in households of WV Area Programs verses comparison areas

The status of WASH access and quality in all surveyed countries was disaggregated to show how WV Area Programs are faring. According to the data (see Figures 1-4), the area of greatest achievement is access to household water service, with household hygiene levels lagging behind.

Basic services verses safely managed services

- For household drinking water service, a "basic" service level means that there is access to an improved water source within a 30-minute roundtrip and "safely managed" means an improved water source is located on premises, available when needed, and free from contamination.
- For sanitation, "basic" means access to improved facilities not shared with other households and no contact with human waste. "Safely managed" means access to improved facilities not shared with other households as well as a handwashing facility with soap and water and the safe disposal of human waste.

DATA ANALYSIS

Figure 1

More than **half** of households have **access to drinking water** from an improved source within **30 minutes of home**

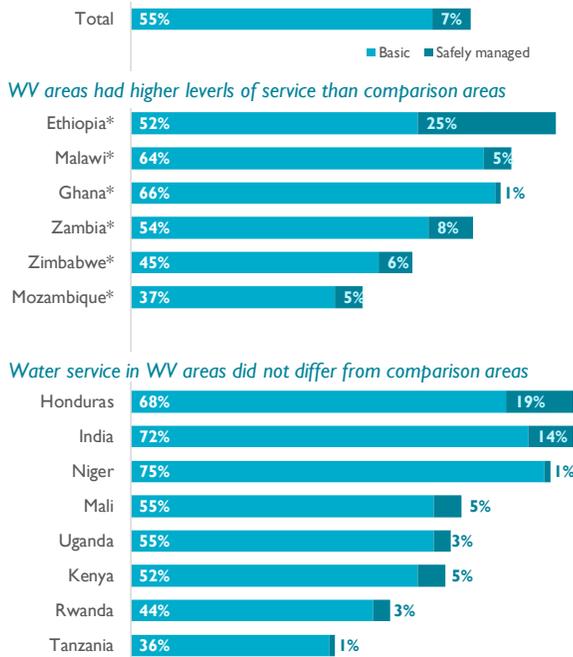


Figure 2

About **1 in 3** households have access to **improved basic or safely managed** sanitation services

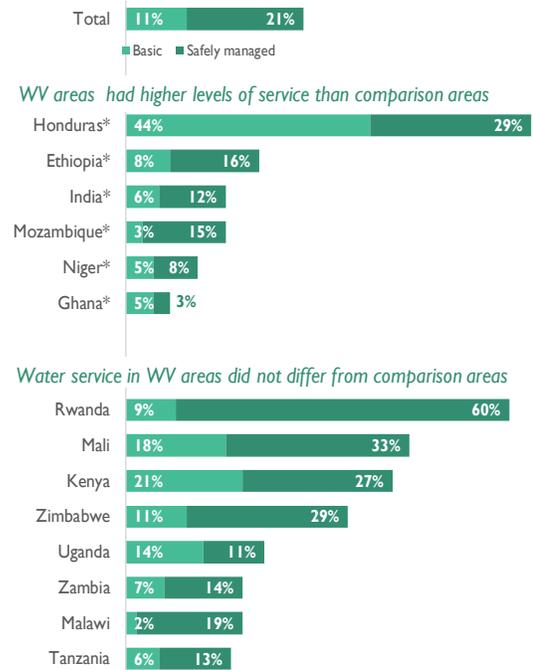


Figure 3

About **15%** of households had handwashing facilities

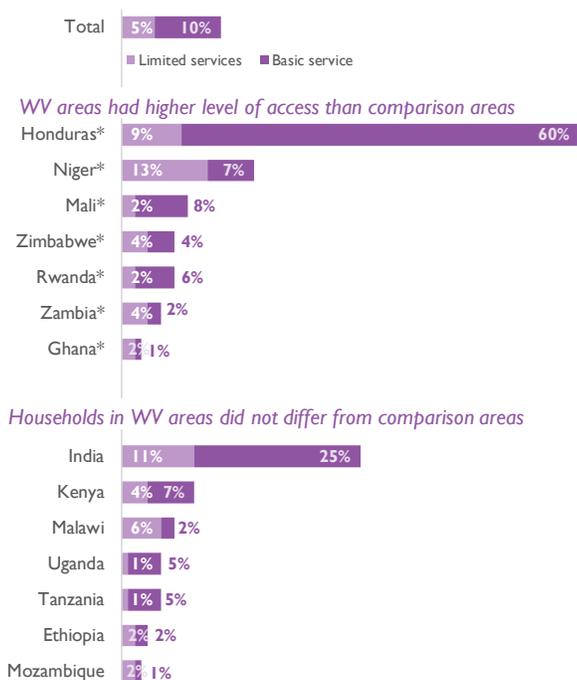
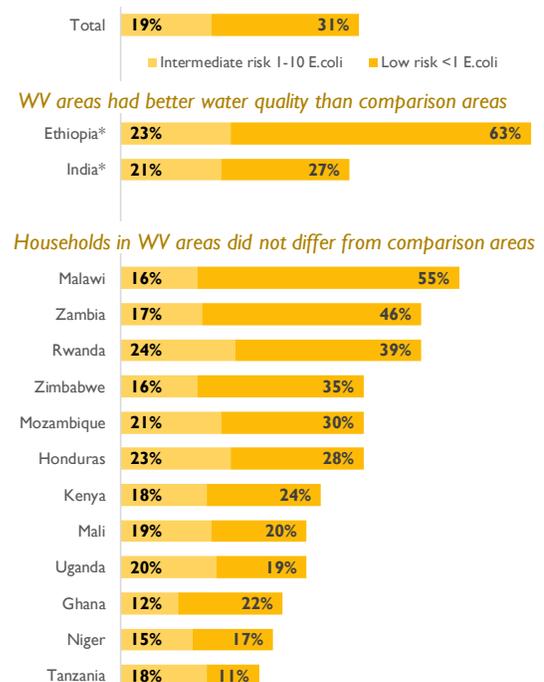


Figure 4

Water quality is satisfactory or good in **half** of households



A few additional comparisons show that:

- In 5 of the 14 countries (Ethiopia, Rwanda, Zimbabwe, Mali, and Honduras), households in WV areas were more likely to have soap at handwashing facilities.
- In 8 of the 14 countries (Ethiopia, Tanzania, Uganda, Malawi, Zimbabwe, Ghana, Mali, and Honduras), households in WV areas were more likely to be satisfied with their water services.
- In 11 of the 14 countries (Ethiopia, Kenya, Uganda, Malawi, Mozambique, Zambia, Zimbabwe, Ghana, Mali, Niger, and India), households in WV areas were more likely to report the existence of a WASH committee year-round, which is a building block for sustainability.
- Nine in 10 adult males and females used a facility that was reported to be safe to use at all times (both day and night). Compared to adults, male (87%) and female (86%) children were slightly less likely to use a facility reported to be safe for use at all times.

➤ CONCLUSION

The WV WASH team has outlined a strategy to build on these global results, addressing areas of weakness and building on strengths. This includes the following:

- **Increased focus and prioritization:** To increase program impact, the geographic and programmatic scope will be better defined.
- **Water service:** The study demonstrated that World Vision is on track to reach everyone in every place that we work with clean water access by 2030. This will continue to be a priority for WV programming. To help achieve this goal, WV will move away from hand pump installations and towards piped water installations that bring clean water directly to more households, health centers, and schools.
- **Robust monitoring:** More consistent tracking and analysis will enable field teams to rapidly respond while educating and learning from communities to improve water and sanitation quality.
- **Improved behavior-change programming:** Changing behavior is one of the most challenging aspects of WASH programming, and locally contextualized programming will continue to be a priority. Additionally, new and promising interventions like the WASH-Up! effort with Sesame Street, combined with work with local faith leaders, may help lead communities towards long-term behavior change and better health outcomes.

These comparisons reveal inconsistent results for WV WASH programming. After examining water quality, sanitation, and water services, results show that no country performed better in WV areas than in comparison areas consistently across all four domains.

WASH BENEFITS AND SHINE TRIALS

The WV/WI survey is not the only recent large-scale WASH analysis to have been conducted. In 2018, several large donors, including the Gates Foundation, USAID, DFID, UNICEF, and the NIH, performed large-scale, cluster-randomized trials to test the effectiveness of various WASH interventions, known as the "WASH Benefits and Sanitation, Hygiene, Infant Nutrition, and Efficacy (SHINE) trials." This study, combined with the WV/WI survey, offers a helpful context for examining WASH access data:

- Historically, population-level gains in child-health have not been achieved without significant improvements in WASH services.
- Chlorination of water *in the home* alone has no effect on health problems like diarrhea. Instead, it appears that changes need to be made to the water supply itself – for instance, by ensuring that houses have a nearby source of clean water.
- Better health outcomes require people to change their behavior, and behavior change is best achieved by visiting participants *at least* every two weeks.
- Managing human waste alone isn't enough: to improve health outcomes, animal feces also need to be safely disposed of or managed.
- A key differentiator in World Vision's programming is a long-term, whole-community approach.

Read more about SHINE: Pickering, A. J., Null, C., Winch, P. J., Mangwadu, G., Arnold, B. F., Prendergast, A. J., ... Humphrey, J. H. (2019, July 11). The WASH Benefits and SHINE trials: interpretation of WASH intervention effects on linear growth and diarrhea, from <https://www.sciencedirect.com/science/article/pii/S2214109X19302682>

- **Evidence building and demonstrating impact:** This study represents an initial step in a long-term effort to continue analyzing the effectiveness of WV WASH programming and global progress towards the SDG goal of ensuring WASH access for everyone by 2030. Continued efforts to measure this progress will be needed, and programming should be adjusted based on continual monitoring and evaluation of impact.

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