A study evaluating the impact of Lifewater International's Vision of a Healthy Village Program for Dodola Project 1

June 2022
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“Carry each other’s burdens, and in this way you will fulfill the law of Christ.

– Galatians 6:2
Dear Friend—

I am delighted to announce that the first project we began in 2019 in the Dodola District of Ethiopia ended successfully. When we started the project, the situation with water, sanitation and hygiene was extremely concerning. The baseline report indicated that 31% of households had at least one child under the age of five that had diarrhea in the week prior to the survey. Furthermore, 79% of the communities didn’t wash their hands at critical times and 87% of them used an unsafe water source.

But, through our comprehensive and holistic Vision of a Health Village model, we are no longer looking at the worst-case scenario! We have witnessed huge transformation locally with WASH practices. The communities in Dodola now have adequate knowledge and resources for safe water, sanitation and hygiene. All the communities have latrines as well, and use of dignified latrines increased from 0% to 50%!

Your partnership helped us to ensure that 80% of homes now have access to water that is safe to drink, and the median time households in Dodola have to travel for water is just 30 minutes, which used to take them 2 hours. Now, women and girls who used to spend their days fetching water have more opportunities to work and attend school.

And one of the greatest victories is that the percentage of households with a child under 5 who had diarrhea in the last week has declined to just 2.4%!

With your support, we have been able to provide proven and durable WASH solutions for those in vulnerable communities. Nevertheless, the impact has gone beyond our expectation and imagination! With safe, private school bathrooms and the incorporating of WASH knowledge into the curriculum, girls are staying in school instead of dropping out.

I kindly invite you to read the endline report and see the great impact that we have achieved together. Children are drinking safe water, people are washing their hands at critical times, and most houses have been certified as Healthy Homes!

I am grateful for your unreserved support, the commitment of my team, the strong support we always have from leadership, and the cooperation of local governments and communities! Together, we are making progress toward safe water for all.

Thank you,

Knife Diriba
Ethiopia Country Director

Country Director Kinfe Diriba

From Our Staff
Dodola, Ethiopia

Globally, 1.7 billion people lack access to basic sanitation, 2.3 billion lack access to basic hygiene, and 771 million lack basic access to water. In Ethiopia specifically, over 91% of the population lacks access to basic sanitation and hygiene, and over 50% lack basic access to water.

During the baseline survey of Dodola Project 1 in April 2019, staff discovered the following information:

- 31% of households with children younger than five years old had at least one child with diarrheal disease within the last week, a dangerous illness that can be fatal for young children. This indicates not only a great need for improved water sources in the area, but the need for a long-term investment in health education to reduce life-threatening illnesses.

- Only 21% of people washed their hands with soap or ash and water before eating and after using the bathroom in the previous 24 hours.

- A mere 1.1% of households used a raised drying rack for their dishes.

- There was not even one household that used a bathroom with walls, a roof, a slab, a door, and a pit cover, all items critical in creating a healthy and dignified environment.

- The average resident of Dodola spent 2 hours on each trip for water, which includes the journey to and from the water source and time spent waiting in line.

Between April 2019 and June 2022, Lifewater served 19,925 people in Dodola with safe water, sanitation, and hygiene.

[Three years ago] we were using contaminated water for all purposes, but now even for our animals we provide clean water!"

– Community member
Key Results

Preventing the death of children is one of the most urgent missions we face as a global society. Diarrheal diseases, caused primarily by unsafe water and poor sanitation and hygiene, are responsible for more deaths of children under five years old than malaria, AIDS, and measles combined.

Safe water, sanitation, and hygiene practices can significantly reduce diarrheal disease and save countless lives of the world’s youngest in the process.

Under-5 Diarrhea

An estimated 297,000 children globally under the age of five die each year from diarrheal disease as a result of unsafe drinking-water, sanitation and hand hygiene1. We focus on this in Lifewater programs because such diseases are largely preventable with simple sanitation and hygiene practices and access to safe water.

Beginning in 2019, Lifewater staff trained WASH facilitators in Dodola, Ethiopia to walk alongside their neighbors and educate them about healthy habits. These habits include handwashing, using a drying rack to keep clean dishes off the ground, and constructing a toilet to keep feces separate from children and common living areas.

These practices and increased access to safe water resulted in a significant reduction in household prevalence of childhood diarrhea in the area. Before Lifewater’s program, 31% of households had at least one child under the age of five with diarrhea in the past week; after, just 2.4% reported the same.

Prevalence of Childhood Diarrhea*

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<td>%</td>
<td>31%</td>
<td>2.4%</td>
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*Households with at least one child under the age of five with diarrhea in seven days prior to survey. Comparison before and after VHV.

1 https://www.who.int/en/news-room/fact-sheets/detail/sanitation
**Improved Health**

Between baseline and endline, safe WASH improved in Dodola with statistically significant increases in access to safe water, ownership of improved latrines, and handwashing behavior before eating and after going to the bathroom. Our data suggest these changes correspond to meaningful health improvements.

At endline, respondents to the household survey reported their health and the health of their children had improved over the course of the previous year. When Lifewater began working in Dodola, 66% of respondents reported that their health had improved in the last year. At endline, 92% reported that their health had improved in the last year. According to the household survey data and qualitative data, this corresponded with reductions in diarrhea in children under five throughout the project area, which is the third leading cause of death for that age group globally.

Mothers with young children, students, the elderly, and people with disabilities struggle to make the journey to safe water sources. Women and girls are the most affected by long walks for water, collectively spending 200 million hours every day gathering water globally. If the walk to a safe water source is too long, they often revert to unsafe but closer sources like unprotected springs. The household baseline survey from Dodola showed that only 13% of respondents used an improved water source as their primary source in the dry and rainy seasons, but that number rose to 80% at endline.

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**Improvement in child health***

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<th>73%</th>
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<td>After</td>
<td>96%</td>
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*Percentage of respondents reporting that child health has improved in the year prior to the baseline and endline surveys. Comparison before and after VHV.

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“*At present we are healthy and economically benefit-ed because medical expenses for [diseases] diminished.*”

– Water Committee Member

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2 *Improved water sources* include piped water, boreholes or tubewells, protected dug wells, protected springs, rainwater, and packaged or delivered water.
House-by-House Data

By surveying households before programs begin and monitoring their progress, we track important data about village transformation.

Sanitation & Hygiene

Washing hands with soap and water, using a drying rack, storing water safely, using a dignifying bathroom, and keeping the home environment safe and clean are all important messages that are shared through Lifewater’s Vision of a Healthy Village program.

Washing with Soap or Ash*

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<td></td>
<td>21%</td>
<td>84%</td>
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*Respondents who washed hands with water and soap or ash in the past 24 hours at the most critical times. Comparison before and after VHV.

Homes Using a Drying Rack*

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<td></td>
<td>1.1%</td>
<td>86%</td>
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*A drying rack is a homemade device to keep clean dishes off the ground. Comparison before and after VHV.

Homes with a Clean Compound*

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<tr>
<td></td>
<td>1.1%</td>
<td>77%</td>
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*Households with no observed feces or rubbish in the compound. Comparison before and after VHV.

From baseline to endline, 2,899 Healthy Homes were registered, and 100% of the villages in the project area were verified as Open Defecation Free!
Open Defecation and Latrine Use

Equipping local communities to eliminate open defecation is one of our highest priorities, and a crucial milestone on their way toward becoming certified as Healthy Villages.

Open defecation is directly linked to increased illness, but over 19.5 million² in Ethiopia still practice it, mainly in rural areas. Safe water cannot be realized when human feces are in open fields, along roads, or anywhere where humans interact. Feces often contain dangerous pathogens that can make people sick, and children are especially susceptible.

This is why the sanitation component of WASH strategies, which are designed to separate people from feces, are imperative to community health. At endline, 72 villages - 100% of the villages in Dodola project 1 - were Open Defecation Free!

“Before Lifewater start[ed] implementing the program, [the] majority of the community who lives in our village [did] not have a latrine, which made the community [use] open defecation. Now, things are changed, almost all of the community have latrine in his household. Which makes the environment clean.”

– Local pastor

² https://washdata.org/data/household#!/dashboard/5161

Homes using Improved Latrines*

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<tr>
<td>Before</td>
<td>11%</td>
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<tr>
<td>After</td>
<td>99.6%</td>
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*An Improved Latrine is any system that hygienically separates human feces from human contact. Comparison before and after VHV.

Homes using Latrines that are Improved with Dignity*

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<tr>
<td>Before</td>
<td>0.0%</td>
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<tr>
<td>After</td>
<td>50%</td>
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*“Improved with Dignity” means the latrine separates human feces from human contact and provides the user with safety and privacy. It has a slab, walls, roof, a pit cover, and a door. Comparison before and after VHV.
Safe water has a domino effect in villages. It allows children to go to school and parents to go to work, increasing both income and education.

Greater socioeconomic stability emerged as a theme from endline respondents. 83% of respondents felt that their wealth had increased in the 12 months prior to the endline survey, compared to 55% at baseline.

With access to safe water, families in the countries we serve gain time and opportunities that were previously impossible. In our work at Lifewater we see women in particular benefit, for with water nearby they have hours of extra time to spend on their families. Many women report successful entrepreneurial pursuits with the time and energy that they save. Families also have agricultural endeavors like farms and livestock that become significantly more profitable with an adequate water supply.

Perhaps most importantly, survey respondents reported significant growth in their knowledge about how to practice good sanitation and hygiene. At baseline, 44% had never received this education and at endline we saw that rise to 100% of respondents saying they had received WASH education. This is one of Lifewater’s greatest successes, when this crucial knowledge filters into a community and becomes generational wisdom that continues to save lives.

"If there is any social event [outside], we conduct our event with comfort, without any [disgust] and shame because our environment [has] become clean and healthy.”

– Community Member

**Community Characteristics**

**Median total time spent fetching water***

| Before | 120 Minutes |
| After  | 30 Minutes  |

*During the dry season. Comparison before and after VHV.

**Perceived changes in household wealth***

| Before | 55% |
| After  | 83% |

*Self-reported based on wealth increased in the 12 months prior.
VHV in Schools

Private bathrooms and safe water mean that more children can stay in school. Better education means less poverty and more hope for the future.

In Dodola, Lifewater completed projects at two primary schools in the area. Children in these schools now spend more time learning, playing, and living healthy lives.

School Enrollment

Globally, a lack of bathrooms and safe water at school is a significant reason why many students miss days of school and often drop out as they progress through primary school. The demands are too time intensive, since most students have to leave school to find water or use the bathroom.

In addition, for female students, the challenges of managing menstruation at school are too difficult. Without a safe, dignifying place to take care of themselves, young women miss school during their period. For many, menstruation makes it difficult to continue pursuing an education.

During the 2019-2020 school year, when the Dodola project 1 began, 89 young women dropped out of the two schools we worked with. But during the 2020-2021 school year that number dropped to 59, and by the 2021-2022 school year it was down to just 24 girls!

In Dodola, both schools have received WASH training for both children and teachers. Students and teachers now have access to handwashing stations, safe water at school, changing rooms for girls, and latrines just for girls. Students help keep the compound free of feces and rubbish, and they have formed WASH clubs to continually remind everyone about the importance of sanitation. There are also new menstrual hygiene management facilities and materials available for girls.

With these changes, every student has an opportunity to complete their education healthy and optimistic about their future!

“After [taking] a practical training of menstrual hygiene management they attend the class without any drop out.”

– Teacher
We are Christians providing access to safe water, and improved sanitation and hygiene, one village at a time.

Learn more about Vision of a Healthy Village at lifewater.org/our-process, and partner with us for lasting change today.