

VISION OF A HEALTHY VILLAGE

PROGRAM RESULTS: WEST ARSI, ETHIOPIA

MARCH 2019

A statistically significant final evaluation of Lifewater International's first Vision of a Healthy Village program

With joy you will draw from the wells of salvation.

ISAIAH 12:3

Contents

From the President	. 4
West Arsi, Ethiopia: Overview	. 5
Key Results	. 6
Church Mobilization	. 8
House-by-House Data	. 9
VHV in Schools	. 11
Safe Water Sources	12

FROM THE PRESIDENT

Dear Friend of Lifewater,

In 2015, our field teams began a multi-year program using our <u>Vision of a Healthy Village</u> (VHV) approach. This new approach was based on the lessons we learned from 35+ years of institutional experience, best practices in Christian community development, and the collective wisdom of our program leaders in the field.

This approach to solving the global water and sanitation crisis would be a grassroots, data-driven effort to reach every family in every village with safe water and improved health—with increased attention provided to the most vulnerable populations like widows, orphans, and childheaded households.

We are now at the end of the original program cycle and have completed a statistically significant baseline/ endline survey comparison. The results are incredible!

Before we can grasp the immense difference that WASH (water access, sanitation, and hygiene) made for families in this first program, we must first talk about the devastating number of deaths of children under five that occur each year because of diarrheal disease, an illness caused by contaminated water and poor sanitation.

According to UNICEF, the number is 480,000 children.

That's nearly half a million children under the age of five who die each year from something as preventable as drinking unclean water.

For children who do survive frequent bouts of diarrheal diseases, many experience stunted growth, underdeveloped brains, and overall malnutrition.

But, the results are in, and there is great hope.

In our baseline survey, 12% of children under five had diarrhea in the week prior. At the endline survey, that number had reduced to 0.2%, a 98% decrease in the prevalence of childhood diarrheal disease.

Other key indicators include:

- 113% increase in access to safe water
- 22% increase in girls attending school
- 69% decrease of medical expenses
- 107 discovery bible studies started

By the grace of God, many lives are being saved.

Between October 2015 to September 2018, the Vision of a Healthy Village approach was carried out in eight rural kebeles (wards), serving 33,822 people with safe water, sanitation, and hygiene.

In this document are the results of the VHV Program Cycle 1 Survey as well as qualitative data gathered from anonymous focus groups who took part in the VHV program.

Thank you for partnering with us to make this life-changing work possible.

For Christ and His Kingdom,

Justin NarducciPresident/CEO

Lifewater International

West Arsi, Ethiopia

The rolling, green hills of central Ethiopia are home to some of the most water-poor communities in the world. It's in these remote places that we are working to bring safe water and improved sanitation to children and their families.

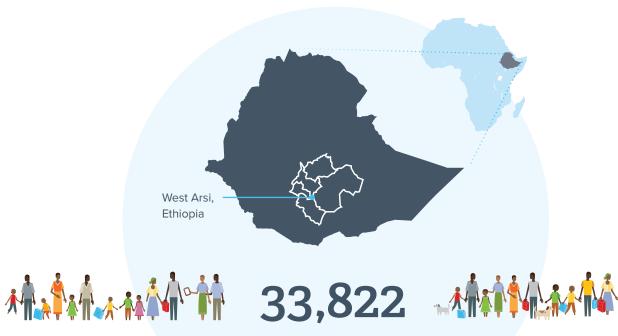
During an initial 2015 survey of the West Arsi zone of central Ethiopia, Lifewater staff discovered the following information regarding health and wellbeing.

- On average, 12 percent of children under five had diarrhea in the seven days prior to the survey.
- The average family spent over \$17 USD per month on medical care.

- 69% of respondents said water quality is their community's greatest challenge.
- 98% muslim population, historically closed to Christian activities.

From October 2015 to September 2018, Lifewater operated in eight rural kebeles and served 33,822 people with safe water and comprehensive WASH activities.

Following program completion, staff conducted household and school surveys, as well as focus group discussions, to measure WASH progress and worldview change in the area.



people served

Key Results

Preventing the death of children is perhaps the world's most urgent and united mission. Diarrheal diseases, caused primarily by unsafe water and poor sanitation, are responsible for more deaths of children under five years old than malaria, AIDS, and measles combined.

Safe water and sanitation are urgent needs for communities like those in West Arsi, where only 28 percent of people reported drinking safe water before the start of the program.

UNDER-5 DIARRHEA

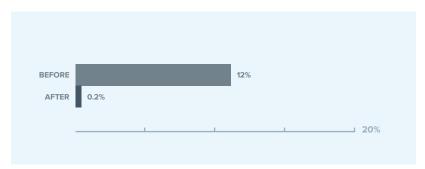
UNICEF reports that 480,000 children under the age of five die each year due to diarrheal disease, an illness caused by drinking contaminated water and practicing poor sanitation.

Even if children do survive the disease over and over again, repeated bouts of diarrheal disease contribute to malnutrition, dehydration, and weakened immune systems for life.

From 2015-2018, Lifewater staff trained community members to serve as "health promoters." These health promoters traveled house-by-house to teach their neighbors vital health practices.

The results show that in West Arsi, sanitation, hygiene, and safe water decreased the prevalence of diarrheal disease by 98 percent, virtually eliminating the disease in children in the area.

Childhood Diarrhea



Comparison before and after VHV program.



"People used to live in an unhealthy environment and we drank bad water, but now thanks to the Almighty Lord, we have safe water for our communities. Children are safe from diarrhea and other diseases. All our communities bless the Lord for the good thing Lifewater did in the area, [including the] expansion of God's ministry."

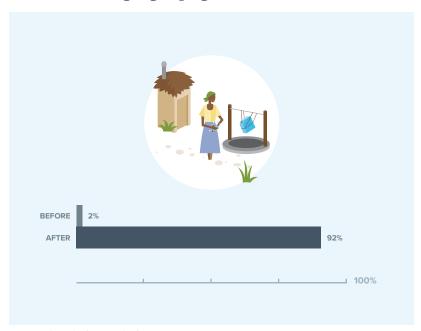
GAMEDA, COMMUNITY HEALTH WORKER

SAFE SANITATION

Using a simple pit latrine separates people from feces, which drastically decreases incidence of waterborne diseases. Latrines cost little to construct, and they provide both improved health and a sense of dignity for all who use them. Building household latrines promotes community buy-in and are all constructed by the families themselves.

In the VHV program completion survey, 92 percent of households had an improved latrine "with dignity," meaning a bathroom that met every basic health and safety requirement.

Households Using Dignifying Latrines



Comparison before and after VHV program.



"We do not worry about where we sit and where my children are playing. [Now that there is no open defecation] I am proud and happy with my environment."

A MOTHER

Church Mobilization

Lifewater works alongside local churches, mobilizing believers to help their neighbors learn healthy habits and transform their communities.

When people know they are loved by God and are equipped for success, it transforms an entire community in a deep, lasting way.

When we enter a community to bring health and safe water, we are joined by church partners who conduct theological training for church leaders on the basic tenants of the Christian faith, providing a firm foundation from which to grow. This gives hope to families living in extreme poverty.

We're seeing incredible results and spiritual transformation. For confidential data on the impact of our church partnerships, contact us at info@lifewater.org or call us directly at (805)-541-6634.



"Lifewater has served both
Muslim and Christian equally.
They give safe water to all, not
just Christians, and people have
begun to praise God because
of Lifewater."

A MUSLIM LEADER

House-by-House Data

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

HYGIENE

Washing hands with soap and clean water, using a drying rack, storing water safely, and keeping the home free of garbage are all additional components of Lifewater's Healthy Home criteria.

In West Arsi, 90 percent of safe water containers examined were deemed "safe," meaning they had narrow mouths with a lid and their overall appearance was clean.

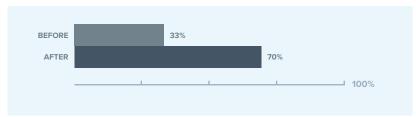
Below are the results for the remaining Healthy Home criteria.



"I feel confident and beautiful because I keep my personal hygiene. You only have confidence to sit and talk to people if you are clean."

FEMALE STUDENT

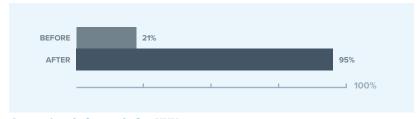
Homes Washing with Soap or Ash*



Comparison before and after VHV program.

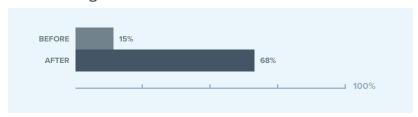
*Within 24 hours prior to survey.

Homes Using a Drying Rack



Comparison before and after VHV program.

Homes Using a Rubbish Pit/Pail



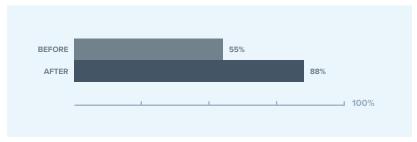
Comparison before and after VHV program.

COMMUNITY CHARACTERISTICS

Before VHV, water was listed as a problem in the West Arsi villages along with poor quality roads and underfunded public health clinics. After the program, community members viewed water in the top four greatest resources.

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. As a result, we often find that families are wealthier for having safe water access.

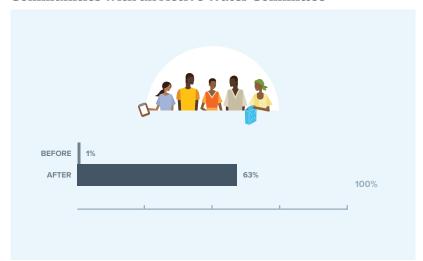
Wealth Increase*



*Percentage of people reporting their wealth had increased in the past year. Comparison before and after VHV program.

To monitor these valuable water sources, villages elect respected leaders to join their water committee, and Lifewater trains them to monitor their new source.

Communities with an Active Water Committee



Comparison before and after VHV program.



"I have got lessons from Lifewater staff... I have learned passion and commitment."

COMMUNITY HEALTH WORKER

VHV in Schools

Safe bathrooms and clean water mean more children stay in school. Better education means less poverty, and less poverty means hope for the future.

Through VHV, generous donors and community members completed 14 school WASH projects so that children in remote areas of Ethiopia could learn, play, and grow.

SCHOOL ENROLLMENT

Safe water and bathrooms help students, especially girls, go to school and stay in school.

In addition to programs with rural villages, Lifewater designs and constructs multi-stall school bathrooms with drainable pit toilets that are built to last. Each school also features permanent handwashing stations to improve hygiene.

At the end of the first VHV program cycle, 22 percent more girls were attending school than before their schools received clean water and bathrooms.

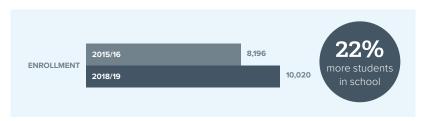
Overall, the West Arsi schools saw a 1,824-student increase in enrollment after Lifewater programs.

Girls Attending Schools



Comparison before and after VHV program.

School Enrollment



Comparison before and after VHV program.



"We can compete with the boys now because we do not miss school every month."

FEMALE STUDENT



"[Students] used to get thirsty during the day and miss class searching for water... [Now] seeing that female students can use latrines without fear, while keeping their hygiene, is a pleasure. No more children feel shame because they lack a private latrine. No more children suffer from thirst. No more children come back to the classroom smelling of feces. No more children miss their classes because of a shortage of water or lack of latrines."

TEACHER AT PRIMARY SCHOOL

Safe Water Sources

For families in the developing world, clean water is the first step on a path out of poverty.

With a safe water source nearby, women and children spend less money treating deadly waterborne illnesses, less time walking dangerous roads to fetch water, and more time with their families, working, or going to school.

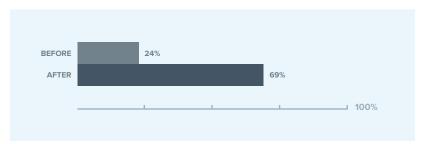
ACCESS AND USE

After VHV, 69 percent of households were drinking water from a safe water source. Challenges such as the lack of available springs in the area, the difficulty of the West Arsi geography, and the remoteness of our programs have prevented some villages in the area from receiving safe water.

Despite these setbacks, the data showed a 192 percent increase in safe water access in the region. The remaining villages will receive their water point within the next two years.

Additionally, 100 percent of villages with a safe water source said that it had maintained functionality in the past year. This indicates high-quality materials, construction, and regular monitoring.

Households Using a Safe Water Source



Comparison before and after VHV program.

Safe Water Construction in West Arsi



Comparison before and after VHV program.



"We don't feel shame when guests come to our house because we have latrines and our home and village is clean and beautiful."

COMMUNITY MEMBER



"Before Lifewater, children visited the health clinic at least twice in a month. But, now it's not even one child a month because their surrounding is clean and they have access to clean water. It really makes you happy to see children playing happy and healthy... drinking safe water. Lifewater has lightened my burden."

MEGERTU. GOVERNMENT HEALTH WORKER

FETCHING WATER

Before Vision of a Healthy Village implementation in West Arsi, young girls and women were spending an average of an hour and a half journeying to fetch water during the dry season.

When asked this question following Lifewater's program, the average time fell to 52 minutes for a round trip journey, a figure which includes households who do not yet have a safe water source.

Lifewater is identifying communities that need additional water sources to meet the 30-minute total travel standard for basic water access decided upon by the World Health Organization.

Our teams will construct additional water sources to meet this higher standard of service.

The Journey for Water



Comparison before and after VHV program.

OPPORTUNITY FOR IMPROVEMENT

The end-line survey revealed that the basic water access standards were not met. These standards were developed during the project period by the World Health Organization (WHO) and outline that the total journey for water should be 30 minutes or less. Lifewater will be partnering with the community to provide additional water sources to meet/exceed this new standard.



We are Christians committed to ending the global water crisis, one village at a time.

Learn more about Vision of a Healthy Village at lifewater.org/our-process, and join in lasting change today.