

"Together we can give True Water
True Life!"



# The Problem

**Global Crisis and the context in Peru** 







# THOUGHT TO PONDER?

We are in the USA with abundant water, but do we know how valuable it is?

Can you imagine what life without clean water to drink?

... Or for that matter a regular, reliable supply of water on demand and basic sanitation facilities such as a toilet?





# WHY DOES VERA AQUA VERA VITA EXIST?

# Because there is a **Global Water Crisis!!!**





# **SOCIAL IMPACT**



**YouTube** 



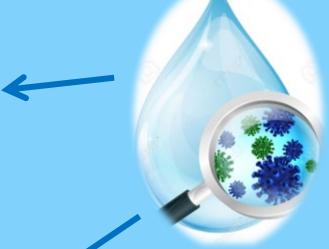
# The Reality - Water Contamination



- Fatigue
- Nausea
- Dehydration
- Weight Loss



- High Fever
- Liver Swelling
- Liver Inflammation and damage





- High Fever
- Severe Headache
- Stomach Pain



- Loose stools
- Fever
- Abdominal Pain
- Dizziness

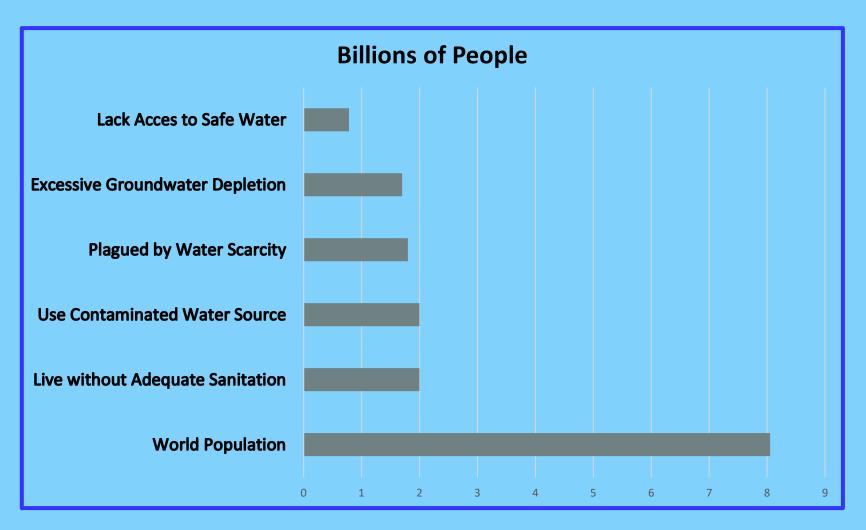


- Vomiting
- Leg cramps
- Dehydration
- In severe situations, kidney failure



## THE REALITY

#1 Global Risk Based on Impact to Society...



**Current Population of the World: 8.05 Billion** 



## LIVES ARE AT STAKE

## **SOCIETAL IMPACT**

## • Impact on Education:

 Globally 443 Million Collective School Days Lost Annually.

## • Financial Impact:

 Globally \$260 Billion Collectively is Lost Annually.

## **HUMAN LIFE IMPACT**

## Overall Mortality Rate:

 869,000 People Globally, or Approximately 2,300 People per Day.

## • Child Mortality Rate:

• 1 out of Every 10 Deaths of Children Under 5 is Due to a Water-Related Disease.



... sadly, today, one child dies from a water related disease every 90 seconds!



## PERU WATER CRISIS

- 75% OF RURAL
   COMMUNITIES have
   unmanaged drinking water
   services
- 44% OF RURAL
   COMMUNITIES don't have basic sanitation facilities
- 12% OF CHILDREN UNDER
   THE AGE OF 5 experience
   chronic diarrhea due to
   waterborne diseases



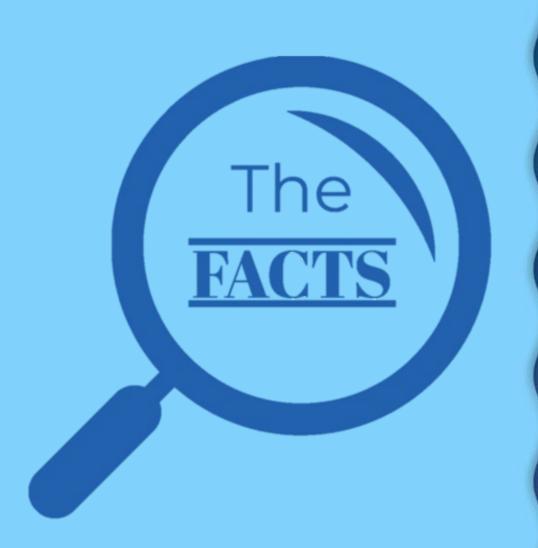


# SUSTAINABILITY IS A BIG PROBLEM!

In 2004 in a study done by the Rural Water Supply Network and USAID ....

Across 20 developing countries/regions

~40% of Implemented Clean Water Solutions were Non-Functional.





# The Solution

What is VAVV all about?







# THE STORY BEHIND VAVV

- 2011 | Inception of the Idea: student mission trip to Haiti with St. Thomas Aquinas Catholic Church
- 2011 2015 | Development of the Idea: growing professional experience, network, and concept
- 2015 | Started Pilot Project: commenced planning & engineering for first project in Monte Castillo, Peru that served as the foundational project from which VAVV was born
- 2016 | Pivotal Professional Milestone: Jacob acquired Professional Engineering (P.E.) license
- June 13, 2017 | VAVV Is Born: incorporated as a nonprofit NGO in the state of Texas
- February 2018 | Big Milestone: Jacob starts working part-time for VAVV
- March 2018 | Granted 501(c)3 Status: IRS grants VAVV tax-deductible status
- May 2019 | Big Milestone: Jacob begins working full-time for VAVV
- August 3, 2019 | Completed First Project: clean water for the community of Monte Castillo



## **OUR MISSION**

By tapping into the physical and holistic nature of water, we **Empower** people and communities in developing countries to generate clean water and sanitation solutions that bring true water true life.





## **OUR HOPE**

### **VISION**

We envision a world where death, hardship, and poverty caused by lack of access to clean water and improved sanitation are no more. We desire to see people flow from simply surviving to truly thriving!

### **BELIEF**

Lack of access to clean water and improved sanitation is the primary cause of poverty in developing countries. It is not enough to just give clean water; empowerment is the key to sustainable change!









## DIFFERENT IN WHAT MATTERS



#### 1. EMPOWERMENT

- a. Dignity of the person
- b. "Hand-up not hand-out"
- c. "Teach how to fish don't just give fish"

#### 2. HOLISTIC APPROACH

- a. Nourishing the whole person
- b. Triple Bottom Line
- c. Solidarity + Subsidiarity



# The Approach

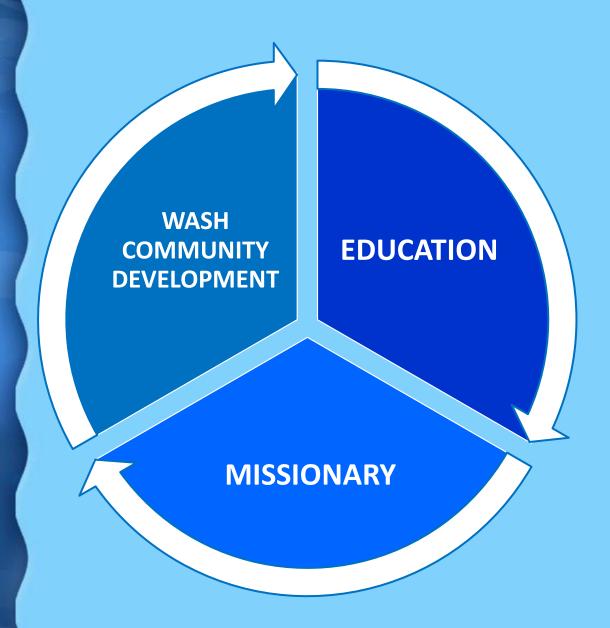
**Community Engagement and Assessment** 







## THREE PROGRAMS



# 1. WATER, SANITATION, AND HYGIENE (WASH) COMMUNITY DEVELOPMENT

- a. Strategic Partnerships
- b. Assessment Surveys
- Engineering Solution Implementation

#### 2. EDUCATION

- a. WASH Education
- **b. TOB** Education

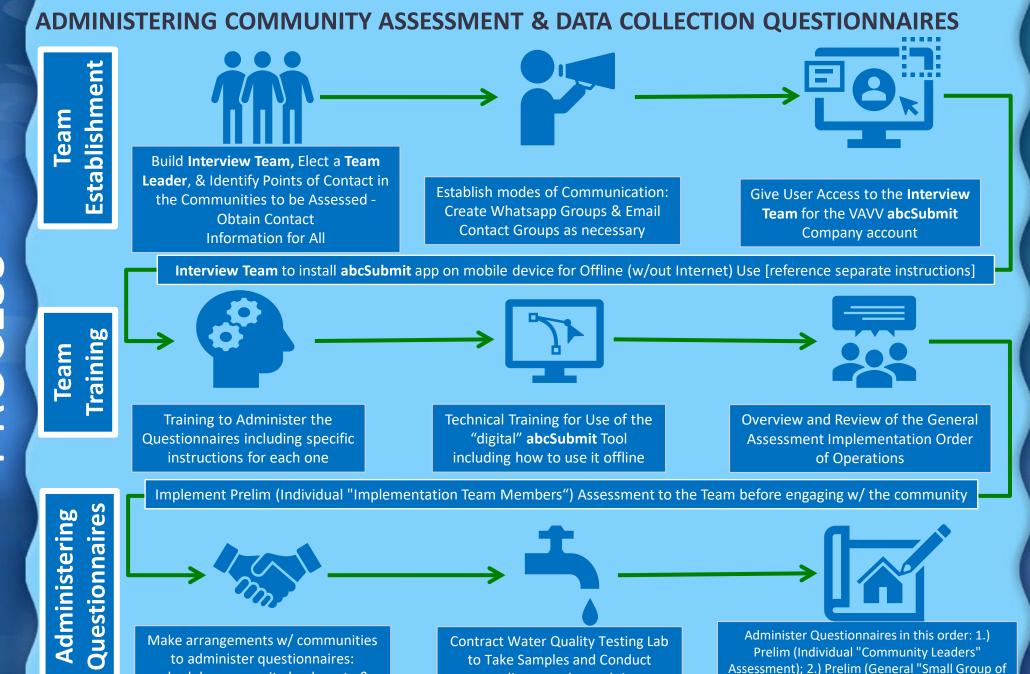
#### 3. SERVICE-ORIENTED

- a. Domestic
- b. Global



#### STANDARD PROJECT IMPLEMENTATION FLOW CHART **Efforts Assessments Preliminary Administer Assessment** and Solidify Scope of Run Scorecard Tool to **Questionnaires to Collect Prioritize the Communities Services Agreement Data for Decision Making** Serve One Community at a Time in Priority Order **Project Delivery Engineering &** .... Construction Management & **Detailed Engineering and** Select Solutions and Construction of the Solution **Prelim Engineering Solution Design Solution Trial Runs & Addressing any Final Issues** Implementation and Education Solution-Specific Training & Commencement of General W.A.S.H. and Theology **Solution Operations** of the Body Education Transition of Ownership





sampling on a day and time

favorable to the community

Leaders" Assessment); 3.) Comprehensive

(Households Assessment)

schedule community leader mtg &

general town hall

Vera Aqua **Vera Vita** 

# Lasting Impact

Monte Castillo Example

**Sustainability & Impact** 







## **OUR TWO-PHASE SOLUTION**



#### **1ST PHASE:**

INTERIM, SUSTAINABLE, AND SCALE-ABLE SMALL-WATER TREATMENT FACILITY



**COMMENCED OPERATIONS ON AUGUST 3, 2019** 

#### **2ND PHASE:**

COMPREHENSIVE LONG-TERM SUSTAINABLE INFRASTRUCTURE IMPROVEMENTS

WASTEWATER ASSESSMENT & IMPROVEMENT MASTER PLAN COMPLETED IN DECEMBER 2020

## PHASE I: SMALL WATER TREATMENT FACILITY



Source Water: Irrigation Canal



Canal Intake Structure & Pump



**Ground Storage Tank** 

(for Dry Weather Water Storage & for Water Particulate Settling/Clarification)

### **Treatment Facility**



Vera Aqua Vera Vita
Funded the building for \$20,000



Intake Pump



Water Mission's
Living Water
Treatment System
(Filtration &

Disinfection)



Storage Tanks
Clearwell
(Clean/Treated Water)



Water Distribution

(On-Site Tap & Trucked Delivery System w/ a small affordable rate system)



## PHASE II: SS System Improvements Master Plan

Preliminary Rehabilitation



Sewage Back-Up Under Previous Conditions



Cleaning (Dredging) of Sewer Lines/Pipes



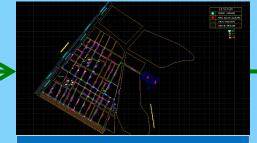
Repair/Replacement of Dilapidated Manholes

Contracted local construction crew to do the work for a \$20,000 Capital Cost - Prelim Rehabilitation & Data Collection are Completed

Data Collection



Televised Video Inspection



Actionable Report, Map, & TV Inspection Video



Acquire Infrastructure Condition Data & System Specifications

Collaborating w/ Senior Design Capstone Team from Texas A&M University (read more here) to complete this work – 100% Complete

Master Planning



Prioritizing
Infrastructure
Improvement Needs

Designing Comprehensive
Solutions to the
Infrastructure Issues

Present Improvement

Master Plan to Community

& Funding Planning

Construction & Improvement Plan Implementation



## 3-YR POST-PROJECT IMPACT ASSESSMENT

- 90% of people use the Water Treatment Facility as their primary source of water
- Sewage backing up into the streets and into people's homes has been eliminated
- Community has taken full ownership of their water and wastewater needs...
  - Through capital improvement projects
  - Repair of existing infrastructure
  - Proactive maintenance of their systems



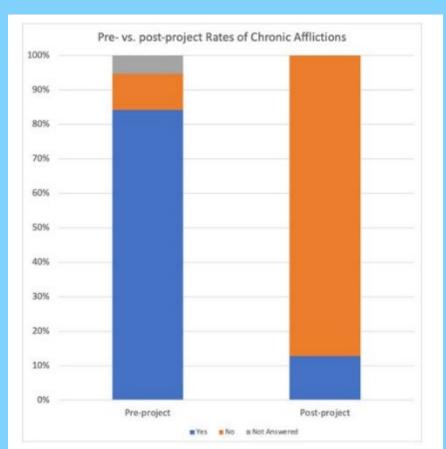


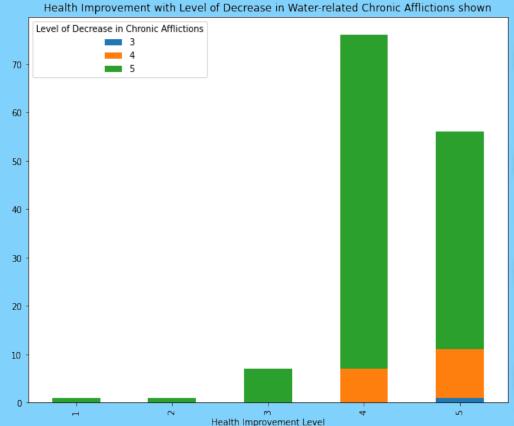






# HEALTH AND QUALITY OF LIFE IMPROVED





#### **Chronic Waterborne Illness Rates:**

• Pre-Project: 84%

Post-Project: 13%

\*This equates to 5,000+ people no longer suffering from Chronic Waterborne illnesses!



# The Future

**Simply Surviving to Truly Thriving!** 







## **OUR WORK**





## **SOCIAL IMPACT**

What's the Impact?		
<b>Recurring Giving</b>	<b>Annual Giving</b>	What does this Gift do every year?
\$25.00	\$300.00	Provides clean water to 6 people every year for generations to come.
\$50.00	\$600.00	Covers the cost of Water Sampling & Quality Testing for 1 community.
\$75.00	\$900.00	Provides clean water to 18 people every year for generations to come.
\$100.00	\$1,200.00	Covers the cost for 1 person to travel on a VAVV mission trip to/from Peru.
\$150.00	\$1,800.00	Provides clean water to 36 people every year for generations to come.
\$200.00	\$2,400.00	Covers 15% of the labor costs associated with project and program delivery and implementation.
\$250.00	\$3,000.00	Provides clean water to a small rural community of 60 people every year for generations to come.



Vera Aqua **Vera Vita** 

generations clean water for generation 1 person

donated \$50

gets

For every

OR WHAT WE LIKE TO SAY: \$50/MONTH PROVIDES CLEAN **WATER & SANITATION SERVICES TO 12 PEOPLE EVERY YEAR GENERATION OVER GENERATION!** 



# ALL WAYS TO GET INVOLVED



### 1. TIME

- a. Be an Advocate
- b. Solidarity Challenge

## 2. TALENT

- a. Volunteer
- b. Project Trip

### 3. TREASURE

- a. Donate
- b. Fundraise



# SOLIDARITY CHALLENGE



# Choose one day (24 hrs) to take the challenge.

If you observe lent, Friday's in Lent make a great day to take the challenge — that way you can practice lenten abstinence and grow in solidarity at the same time!



Fill a container with one gallon of water.

Hint: Use a large milk jug, or marked water bottles (4 liters approximates to 1 gallon)!



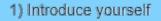
Use that gallon for ALL your water needs.

Drinking, washing hands, cooking, cleaning, etc)



# **SOLIDARITY CHALLENGE (Cont.)**

# Record a video on your experience.



- 2) Answer the question, "Why are did you do this challenge?"
- 3) Share the impact you hope to have!
- \* See some examples below



## Post it.

Tag VAVV (and #SolidarityChallenge) and challenge someone to take the challenge next!



## You did it!

You lived in Solidarity with millions around the globe and had an eye-opening experience of living with water scarcity!



## THE RIPPLE

An empowered community of Vera Aqua Vera Vita Recurring Donors that we call Mission Partners because they are the backbone and Champions for the cause of giving...

TRUE WATER TRUE LIFE!









