

WATER SOLUTIONS



Water is the Plateau community's greatest physical need. The water crisis is complex and multi-faceted. There is no single solution that will solve the whole problem. It must be addressed on multiple fronts.

DLO SE LAVI WATER IS LIFE

Life on the Plateau has revolved around water collection for generations. Just 10-15 years ago, children were being awakened at 2AM to ride for hours on donkeys and mules to fetch a few buckets of water before school. Today, the situation is much improved, but water remains a constant challenge.

THE PROBLEM:

1. All wells drilled in the area are brackish to the point that they are considered unsafe for drinking according to US standards.
2. Rainfall is inconsistent and extended periods of drought are common.
3. Trucking water is expensive and puts the cost of clean water outside the reach of the majority of our community.
4. As a community based on agriculture and animal husbandry, periods of drought mean poverty and, in extreme cases, starvation.

OUR RESPONSE:

To access water through every means possible in order to establish a broad base of options from which we can confront and surmount the perpetual drought that is our reality.

OUR RESPONSE, IN DETAIL

We seek to make water available to our community in the following ways:

1. Rainwater-catchment ponds or "waterholes"

These large basins capture water that comes down in natural ravines when it rains in the mountains. In times past, a system of canals would bring this water to gardens for irrigation; but there was no way to hold more water than what the gardens could absorb. Today, the canals still water the gardens, but they also lead into the waterholes, enabling us to stock water for several months.

The upside:

- The large quantity of water we are able to stock
- The easy availability of the water to anyone who needs it

The downside:

- The cost of periodically cleaning out the waterholes
- The water is not clean

2. Trucking water

We have been able to transport water by tanker trucks from a water source about two hours away.

The upside:

- The water is relatively clean
- These sources often have water when all our other options dry up

The downside:

- The water is brackish, not pleasant for drinking and hard on plants
- The cost of the water itself, fuel, and maintaining vehicles

3. Wells

Our community is located in the driest valley in Haiti. There is very little water available through underground aquifers, and what is available is extremely brackish. We have drilled in six locations, only two have produced any water.

The upside:

- The water is relatively clean
- The wells are in our community and easily accessible

The downside:

- The water is so brackish it is unsafe to drink and it kills certain plants
- The aquifers dry up periodically

4. Metal roofs, guttering, and cisterns

This method of capturing and storing rainwater is the best for providing clean, non-brackish water for drinking and other human use. As more and more homes are able to collect water when it rains, the pressure of need lessens. When one family has a cistern, they share the water with their neighbors. The more families who are able to maximize rainfall in this way, the more water to go around.

The upside:

- The water is clean and sweet (non-brackish)
- The easy availability of the water to anyone who needs it

The downside:

- If there is no rainfall, there is no water; and rainfall is rare.
- The quantity of water captured is proportionate to the size of the roof. Smaller homes are not able to capture as much.

HOW YOU CAN HELP

Donations made toward "water solutions" are put toward whichever of the above methods is most needed at any given time.

Need and urgency vary throughout the year. When the waterholes are dry and a possible rainy season is approaching, it is imperative that they get cleaned out quickly. When extended drought means that all other water sources have dried up, trucking is our only option and is essential. Any time we are able to help a family procure a metal roof and cistern, it increases the water that can be stored when it rains. When any donation toward water is received, Lemuel leadership gauges the greatest need and allocates the funds in that direction.