

# DRINKING WATER SYSTEM PROJECT

LA VIRTUD, HONDURAS



## **LA VIRTUD DRINKING WATER SYSTEM PROJECT**

The village of la Virtud, is a community that produces mostly vegetable crops such as chili peppers, chives, watercress, tomatoes, carrots, radishes, cabbage and potatoes, and plantations of coffee. Also, they grow basic grains on a smaller scale, and part of the young population works in the Industrial Zone of the Municipality of San Pedro Sula.

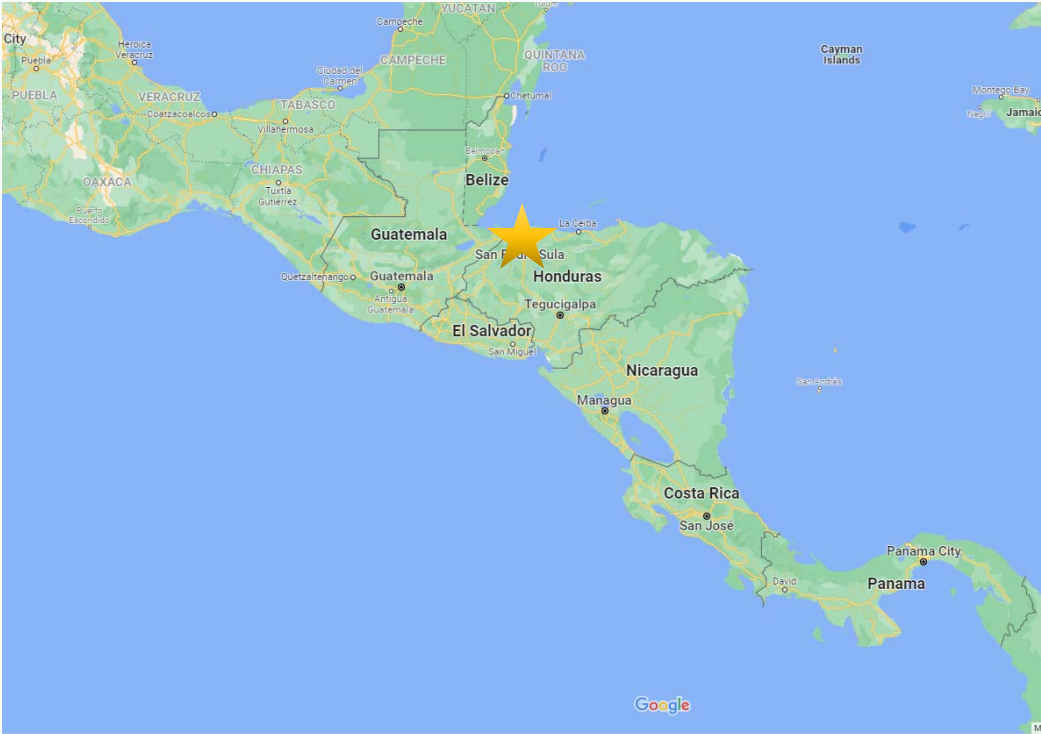
The village is established in the el Merendon mountain range, 16 miles from the city limits of San Pedro Sula. It has the basic services available (water, electricity and mobile telephone) but they lack a drinking water system from which they could supply each house in the community. Many have their own line from the nearest source by means of added hoses. The School, Kindergarten and the Catholic Church do not have water supply, they pull in buckets for the bathrooms when they are in use.

This project will provide a complete Drinking Water system that will satisfy the needs of the community, thus improving living conditions and facilitating various activities in them. Drinking water is essential to sustain life. However, in recent years it has become a scarce resource and difficult to access in some regions of the country.

Drinking water is a fundamental basic need that is not yet accessible to the poorest sectors of the country, such as the inhabitants of the El Merendon mountain, and is not prioritized with a participatory investment plan.

The village's water source was until 1998, very abundant, but due to Hurricane Mitch there was a landslide in the entire watershed and the forest around it destroyed the water source. The community has a spring that gives approximately 2 inches of water in summer and more water in the winter due to the rains.

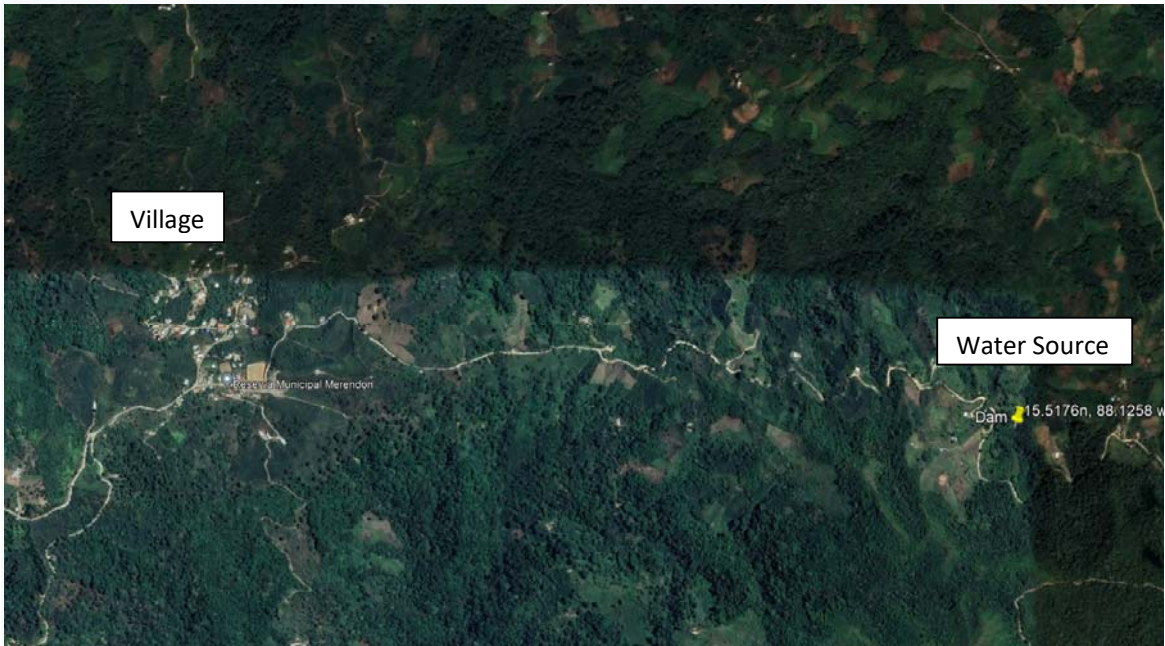
# PROJECT LOCATION



San Pedro Sula, Honduras



Village is west of San Pedro Sula, Honduras



Aerial Photo of Project Location



Village of La Virtud, Honduras

## PHOTOS



Current Dam at Water Source



Current Storage Tank



Current Water Main



General Topography



Representative Housing



Representative Water Services

## DESCRIPTION OF THE PROPOSED PROJECT

The proposed potable water system of the La Virtud village will have a system that will work by gravity, which will be fed from a superficial source of water channeled into a small water pond, located in the village. It will have a new dam that will be four feet high to provide the necessary flow to fill the recharge tank with 20,000 gallons of water; which will also be fed by another existing intake than current one, which has an obsolete purification system, both intakes will be joined to supply the recharge tank with a greater capacity and thus benefit the community to a greater extent.

The proposed water system will supply 65 houses, two schools and on church and will serve approximately 350 people and will improve the quality of living in the community.

### **Infrastructure to be Built:**

For the catchment work:

1. Construction of the Dam.
  - Screen of the dam.
  - Side Walls.
  - Waterproofing (plaster and polish)
2. Construction of sand trap.

For the Water Distribution Line:

- PVC Pipe Network
- Air Valves.
- Cleaning valves

For the Tank Construction:

- Brick storage tank
- Hypo chlorinator

### **Design period**

The design period is 20 years for this gravity drinking water system.

### **Current and future population**

The current population has been obtained from the information provided by the local authorities, relating it to the censuses and the housing count. Future population able to be served by the system is 2,000 people.



## **Sustainability**

The new water system will be under control of the local water board, made up of village users with oversight from authorities in San Pablo Sula. Individual users will be charged a flat fee for connection and usage. These fees will pay for operation and maintenance of the system. Users will be trained on water conservation.

## **Rotary Areas of Focus**

This project meets several of Rotary's seven areas of focus.

1. Providing clean water, sanitation, and hygiene  
This project will provide clean water with a consistent supply to a rural village in the mountainous region of Honduras. The project will be sustainable with the users paying for the system and a local water board overseeing the system operation and maintenance.
2. Saving mothers and children  
This project increases sanitation in the home by providing clean water.
3. Supporting education  
This project will help to strengthen the capacity of this community to support basic education and literacy by providing clean water to the village schools.

## **BUDGET AND FUNDING**

| <b>GENERAL BUDGET TABLE</b>                          |                               |                     |
|--|-------------------------------|---------------------|
| <b>Project: La Virtud drinking water system</b>      |                               |                     |
| <b>Location: El Merendon, San Pedro Sula, Cortes</b> |                               |                     |
| <b>ITEM</b>  | <b>DESCREPTION</b>            | <b>TOTAL</b>        |
| 1  | Preliminary                   | \$ 948.85           |
| 2  | Catchment dam                 | \$ 2,064.67         |
| 3  | Sandtrap                      | \$ 1,877.75         |
| 4  | Valv box ( tank and sandtrap) | \$ 1,001.34         |
| 5  | Storage tank                  | \$ 17,150.04        |
| 6  | Valv box ( conduction line)   | \$ 464.34           |
| 7  | Hypochlorinator module        | \$ 593.24           |
| 8  | Conduction line               | \$ 24,989.46        |
| 9  | General cleaning              | \$ 345.47           |
| 10   | Unforeseen 3.%                | \$ 1,472.69         |
| <b>Total General Budget</b>                          |                               | <b>\$ 50,907.85</b> |

| <b>Proposed Source of Funds</b> |                                   |                  |
|---------------------------------|-----------------------------------|------------------|
| 1                               | Rotary Club of Bartram Trail      | \$ 1,000         |
| 2                               | Rotary Club of Mandarin           | \$ 1,000         |
| 3                               | Rotary Club of Deerwood           | \$ 1,000         |
| 4                               | Rotary Club of Deland Downtown    | \$ 1,000         |
| 5                               | Rotary Club of Deland (breakfast) | \$ 1,000         |
| 6                               | Rotary Club of Ponte Vedra        | \$ 1,000         |
|                                 | District 6970                     | \$ 22,300        |
|                                 | Total Clubs and Districts         | \$ 28,300        |
|                                 | plus                              |                  |
|                                 | Global Grant - 80% of District \$ | \$ 22,640        |
|                                 | <b>Total Project</b>              | <b>\$ 50,940</b> |