

2024



# "RAINWATER HARVESTING AND EMPOWERMENT FOR PEACE."

RAINWATER: PEACE & POWER

*District 4060  
Dominican Republic*

## Background.

Imagine a Caribbean country full of natural beauty, yet where access to potable water is a luxury many cannot afford. In the Dominican Republic, 89% of the urban population and 68% of the rural population depend on bottled water for their daily needs. However, there is a light at the end of the tunnel, and that light could be you.

In this tropical paradise, water is a scarce resource, not due to its unavailability, but because of the lack of proper infrastructure and services. The most vulnerable households allocate up to 12% of their income just to purchase bottled water. Moreover, the absence of an adequate sanitation system endangers the health of communities, especially children.

Additionally, research shows that in Monseñor Nouel province it rains approximately 1 to 2 times a month, while in the community of El Batey it rains 1 to 3 times a month, and this number increases during the cyclone season (from June to November). However, these rains have been diminishing due to climate change and deforestation in the area. In Tucson, Arizona, USA, where it rains less than in Monseñor Nouel province, this rainwater harvesting system has proven to be efficient and sustainable for domestic use.

The Club Rotary Santo Domingo Quisqueya, observing the positive impact and ongoing need, had the opportunity to work alongside the institution Servicio Para la Paz. Motivated by the mission to support this institution and the desire to impact more families, we decided to actively participate in the project. This collaboration strengthened the program, allowing us to extend its reach and deepen its impact in the community. To date, we have impacted over 20 families who have benefited from the project.

## Description.

The Rainwater Harvesting Project in Monseñor Nouel, Dominican Republic, aims to substantially improve the quality of life for approximately 160 families by facilitating access to and storage of water. This initiative not only provides a vital solution for daily consumption and essential activities but also strengthens community cohesion and prevents conflicts by reducing the need to travel long distances in search of water.

We will implement a rainwater collection system with outdoor, above-ground storage tanks, in collaboration with our partner, Servicio Para la Paz. Additionally, an educational campaign will be conducted to teach residents about efficient water use, hygiene practices, and the importance of environmental care. We will also count on our partner, Wine to Water, who will provide filters at affordable prices for the project, thus ensuring access to safe drinking water.



This project not only addresses water and sanitation needs but also contributes to environmental conservation and the empowerment of the community through education and active participation in managing their natural resources.

## Justification

Part of the beneficiary communities has faced issues related to water access for over 5 years, leaving many inhabitants without consistent access to it. Since then, they can only obtain water from the river and underground wells during droughts. Another way to obtain water is by purchasing it from the community store at a cost of RD\$85 (eighty-five Dominican pesos), approximately US\$1.52. Although this may not seem like much, the average income for some families is US\$50, which means they spend 60% of their income on water.

The installation of the Rainwater Harvesting System would prevent environmental damage in the community and issues between water clients and suppliers due to price increases from scarcity, and would minimize the pollution of the water resource before consumption.

<b>Now</b>	<b>After installing rainwater harvesting.</b>
On average, a family of four consumes 15 water tanks per month, which means they spend \$30 dollars a month just on water.	Families in the community would not have to pay to have access to water.
Families who cannot afford water must draw it from an underground well or river where the water is not always clean.	Families will have safe water in their homes thanks to the installed tank and the water dispenser with a filter.
Some families need to wash clothes or clean kitchen utensils in nearby rivers, which in some cases can damage the rivers and their entire ecosystem.	The project would contribute to environmental care and the proper use of water.

The implementation of this project is aligned with the action lines of Law 1-12, the National Development Strategy 2030 of the Dominican Republic, which dictates the following:

2.5.2.3 Develop new network infrastructures that allow for the expansion of coverage of potable water services, sanitary and storm sewage, wastewater treatment, and subsoil protection, with a focus on sustainable development and prioritizing traditionally excluded areas.

4.1.4.5 Expand and maintain infrastructure for the regulation of water flows, prioritizing investments in multipurpose works, with a focus on sustainable development.

## Objetive

### General

Provide water storage mechanisms to 160 families and schools in the province of Monseñor Nouel in the Dominican Republic through the development of the Rainwater Harvesting System, accompanied by an educational campaign on the proper use and care of water.

### Especific

- Rotary SDQ and Servicio Para la Paz will train volunteers and residents from various communities on the topic "Water and Sustainability: Rainwater Harvesting."
- Install rainwater harvesting systems for 160 families from different communities in the province of Monseñor Nouel, affected by the lack of water in the Dominican Republic, with the consent and support of the neighborhood board to provide a reliable source of water.
- Install water dispensers with filters to provide access to safe drinking water by Wine to Water.

## Ubication

El proyecto se desarrollará en las diferentes comunidades de la provincia Monseñor Nouel de la Republica Dominicana afectada por la falta del acceso y almacenamiento del agua.

## Beneficiaries

The project will be developed in various communities of the Monseñor Nouel province in the Dominican Republic, which are affected by the lack of water access and storage.

## Components and Activities

The implementation of the project will be carried out under the leadership of Rotary Santo Domingo Quisqueya and executed by Servicio Para la Paz together with community members, with the intention of developing a culture of empowerment among the inhabitants to sustain the project, involving them from its initial phase, development, and closure. This project will consist of the following components:

**1. Education:** Within the framework of this component, the following activities will be carried out:

- A workshop will be held to educate the community on "Sustainable Use of Water Resources in the Community."
- There will be an awareness campaign on the proper use of water for human consumption.

**2. Intallation components.** Within the framework of this component, the following activities will be carried out:

- Collection systems, making use of drainage systems and gutters.
- Conduction systems through gutters and pipe systems that will be used to transport the collected water to storage areas and points of use.
- Storage systems to maintain the collected rainwater for later use. These are typically above-ground tanks.
- Treatment for the consumption of safe water. Treatment usually includes a water dispenser with a clay filter containing elements that help make the water safe for consumption or hydration.

## 2. Sostenibility components

The sustainability of our program will be ensured through effective collaboration with local neighborhood committees, which will play a crucial role in the monitoring and oversight of the project. This approach is part of the "Neighborhood Committees for Development and Peace" program, implemented by our partners at Servicio Para la Paz. Through this program, we will provide ongoing training and tools to the members of the neighborhood committees, equipping them to effectively and autonomously manage the maintenance of the facilities and the proper use of water resources. This community-focused approach not only promotes local accountability but also strengthens community cohesion, ensuring

that the implemented solutions are sustainable and benefit future generations.

## Budget:

Ítem	Description	Number of people will be benefit	Quantity of materials	Unit Cost	Total
<b>1</b>					
1.01	Cost of 160-gallon water tank	160	160	65.41	<b>10,465.6</b>
1.02	Pipes and installation materials.	160	160	41.07	<b>6,571.2</b>
1.03	Transport of materials and water tanks	160	160	16.97	<b>2,714.0</b>
<b>2</b>					
2.01	Water dispenser with Wine To Water filter.	160	160	17.86	<b>2,857.6</b>
<b>3</b>					
3.01	Multimedia Content	160	1	21.43	<b>2,143.0</b>
<b>4</b>					
4.01	Logistics and training expenses per 8 month	160	25	232.48	<b>5,812.0</b>
<b>Total Budget</b>		<b>160</b>	<b>N/A</b>	<b>395.22</b>	<b>30,563.4</b>

## Evaluation

Prior to the project, a census and survey will be conducted to assess the current situation of the community regarding health, water access, and issues due to the lack of water. During the project development process, questionnaires and censuses will be carried out to measure the level of impact on the community.

## Timeline

8 Month

## Evidence of previous results.





