

# Rainwater Harvesting in rural communities in Trinidad: Success stories and lessons learnt

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## Background

Rainwater Harvesting (RWH) involves the collection and storage of rainwater for reuse at a later time. RWH is a useful water source, especially for rural communities that lack regular access to a pipe or truck borne water supply. The Environmental Solutions for Sustainable Communities Project started in 2011, is still running and is supported by the Global Water Partnership-Caribbean (GWP-C), the National Institute of Higher Education, Research, Science and Technology (NIHERST), the Water Resources Agency (WRA), and Ministry of Community Development as well as various Non-Governmental Organisations and the private sector. The project focuses on rural communities without a pipe borne water or otherwise reliable supply and is specifically focused on community centres and schools as these often double as emergency shelters.

## Project Objectives

- To increase public awareness of the need for water conservation and the benefits of Rainwater Harvesting (RWH);
- To train a cadre of skilled persons to install and service RWH systems;
- To promote safe and hygienic water collection practices; and
- To build climate resilience into the water sector in Trinidad and Tobago.

## Method

Stakeholder meetings with local Non-Governmental Organisations (NGOs) and Community-Based Organisations (CBOs) were conducted in order to identify communities most in need of a supplemented water supply. Communities were then engaged and community mobilisers, willing to assist with the coordination of workshops, were identified. Workshops were subsequently coordinated with the assistance of invested and dedicated stakeholders and community members were encouraged to attend the workshops, where they learned about safe rainwater procurement methods and assisted with the construction of the RWH systems.

The training/RWH programme was supplemented with overall water resources management training consisting of four modules: introduction to water management, the sustainable community model, vector control, and water harvesting techniques.

## Project Outcomes

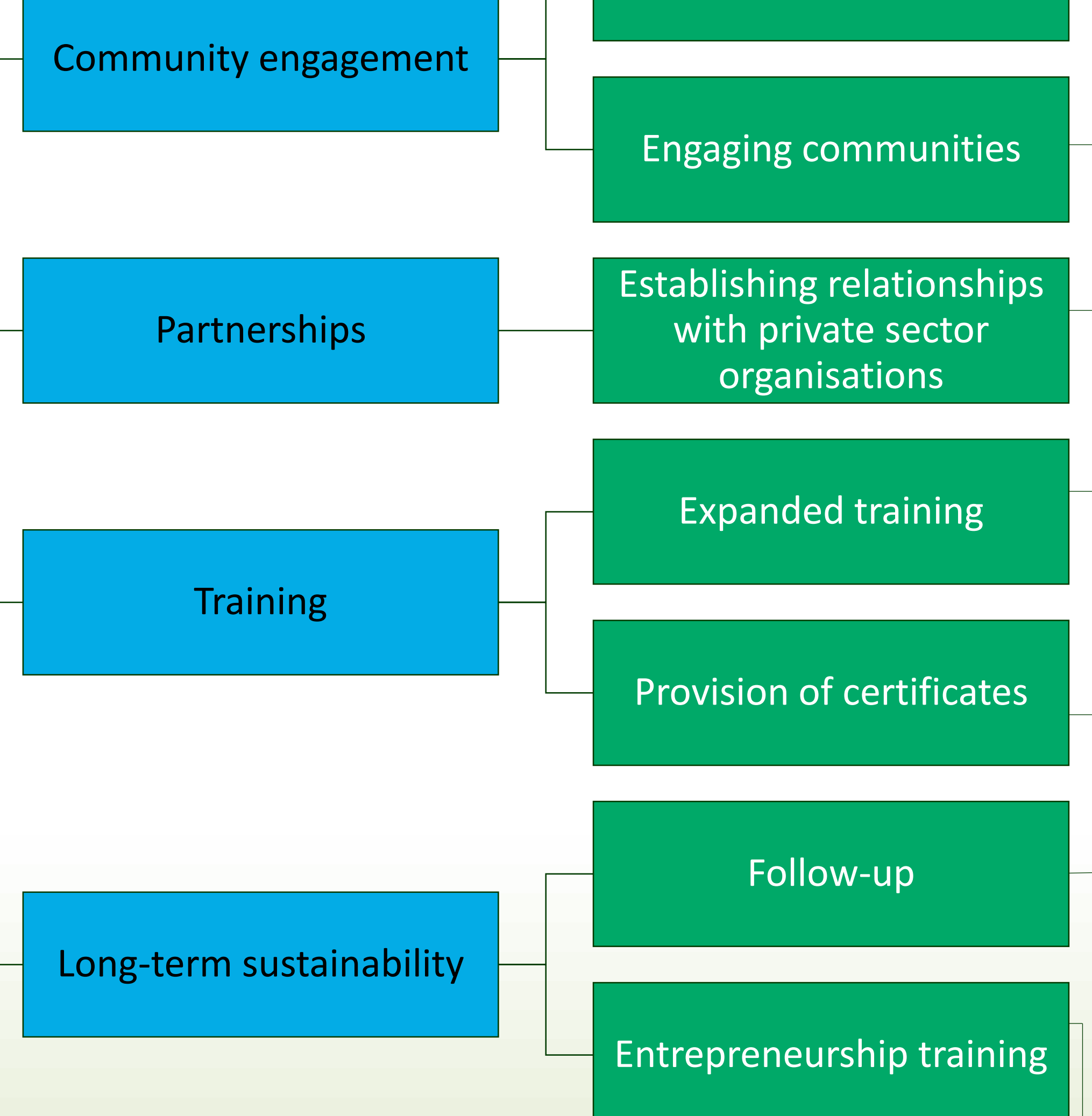
Installations were completed at 18 schools, three community centres and an NGO facility. These sites were located in St. Ann's, Toco, Moruga, Barrackpore, Mayo, Fishing Pond, Biche, Lopinot, and Guaico Tamana.

Training for RWH system installation and maintenance was conducted in these eight communities. Workshops were not only geared towards maintaining systems put in place at schools and community centres, but also included general training on water resources management and environmental issues. A total of approximately 100 persons were trained in these workshops. In addition to this, entrepreneurship training was conducted in Moruga and Barrackpore in 2013, providing 10 to 25 persons with skills to continue building RWH systems in other areas as a business endeavour.

Public education for the community and students was conducted at all schools fitted with RWH systems. Education campaigns included general issues surrounding water conservation, details on the RWH process, and the importance of Rainwater Harvesting. Over 3500 students nationwide benefitted from education campaigns.



## Lessons learnt



Targeting communities with a real need and desire to engage in rainwater harvesting is necessary in order to achieve high, active participation and continuity of the project.

As many communities suffer from 'project burnout', working with community mobilisers within each area in order to establish a relationship built on trust can greatly assist in achieving objectives.

Identifying the motivation of each community is paramount and creates opportunities for maximum engagement in Rainwater Harvesting. In some cases, the strong need for water security drives their engagement, while in other communities the interest is more driven by an entrepreneurial drive, strong ties to the land, a strong interest in conservation issues, or education.

Establishing relationships with private sector organisations resulted in increased innovation for the design of the RWH systems.

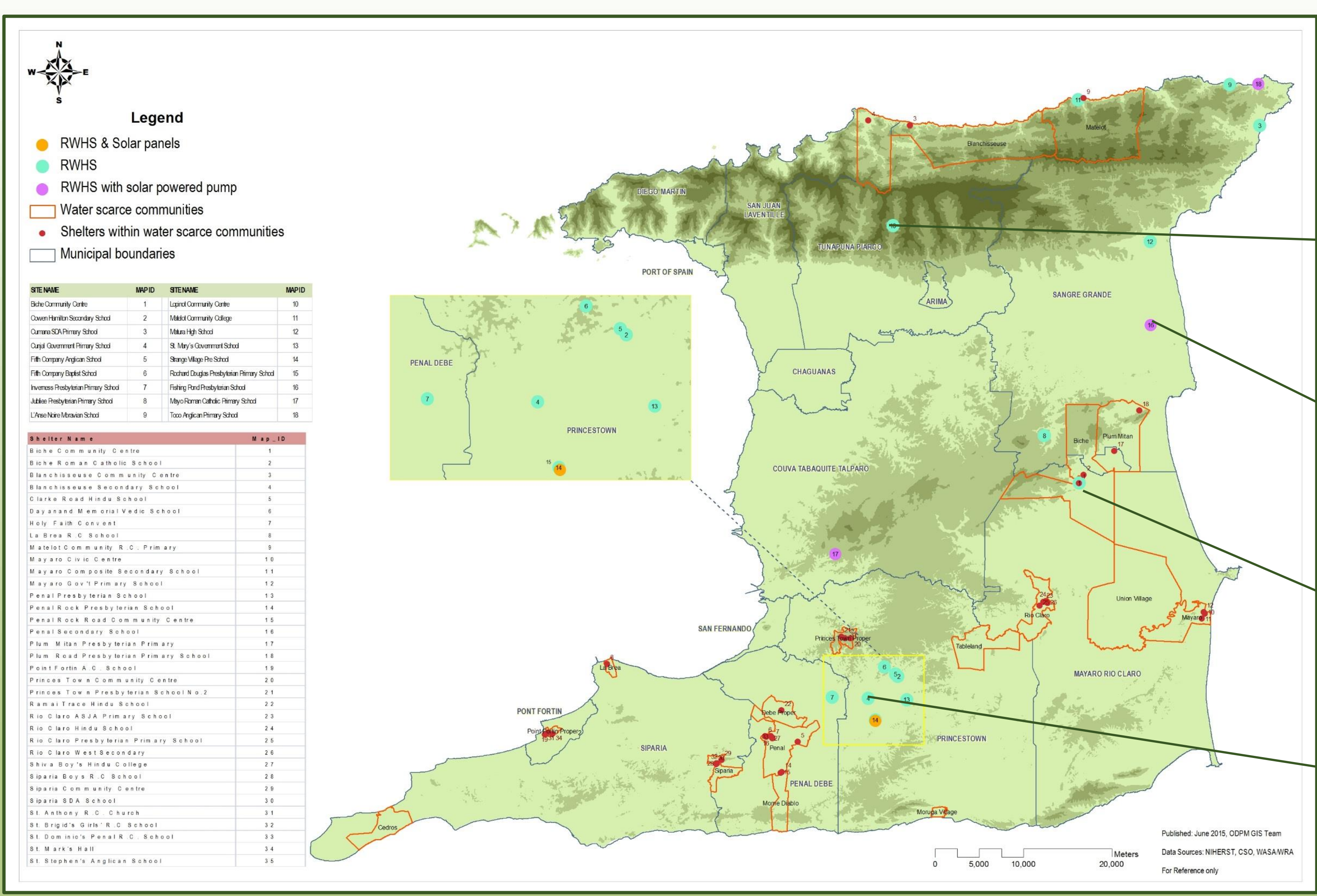
- A local company now produces an additional filter, referred to as a water catchment basket, which can be fitted to the top of the tank for additional filtration of collected rainwater.
- A second company provided solar energy solutions for water pumps at three schools.

The training was generally very well received. Participants expressed great interest in environmental issues discussed and often requested further training in related topics, such as recycling and community development. RWH training embedded within other water resources and environmental management training is therefore recommended.

Providing certificates upon course completion creates some additional motivation for course attendance and completion.

Following up on the initial project period is important for continued success and product replication.

This training provided avenues for community members to supplement incomes by broadening their skill base.



## Specific successes

**Lopinot**  
Café Mariposa has been retrofitted with RWH systems to assist with their home grown produce.

**Fishing Pond**  
The Fishing Pond Presbyterian School was the only school that opened its doors to students after a water main remained damaged for over one week.

**Biche**  
Retrofitting with RWH systems has taken place in two households in addition to the completion of two new private RWH systems.

**Cunjial**  
Cunjial Government Primary School no longer closes due to a lack of water as a result of RWH installations.



## Acknowledgements

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