

Project Documentation: Support Five Villages with Mechanised Boreholes

Project Overview:

This project aims to install mechanised boreholes in five underserved villages, providing reliable access to clean and safe water for over 2,000 residents. The initiative seeks to address the persistent challenges of water scarcity, improve public health, and support sustainable development by ensuring access to this vital resource.

Problem Statement:

In many rural areas, including the five target villages, residents rely on unsafe water sources such as rivers, open wells, and seasonal streams. These sources are not only unreliable but also prone to contamination, leading to waterborne diseases such as cholera, typhoid, and dysentery. Additionally, women and children often walk long distances to fetch water, limiting their time for education, work, and other productive activities.

Objectives:

1. To install one mechanised borehole in each of the five villages, providing a safe and sustainable water source.
2. To reduce the prevalence of waterborne diseases by at least 50% within the first year of operation.
3. To alleviate the burden of water collection on women and children, enabling them to focus on education and economic activities.
4. To empower the communities by involving them in the construction, operation, and maintenance of the boreholes.

Proposed Solution:

Mechanised boreholes, equipped with electric or solar-powered pumps, will be constructed in strategic locations within the villages. Each borehole will be connected to a storage tank and fitted with multiple taps for easy water access. The system will be designed to provide clean water to all households in the community, with a capacity to serve a growing population over the next decade.

Activities:

1. **Community Engagement:** Conduct meetings to raise awareness, gather input, and foster local ownership of the project.
2. **Site Assessment:** Identify suitable locations for borehole drilling based on hydrogeological surveys.
3. **Drilling and Construction:** Execute the drilling, install pumps and tanks, and set up water distribution points.
4. **Water Quality Testing:** Ensure the water meets safety standards through comprehensive testing.
5. **Training:** Train local committees to manage and maintain the boreholes, ensuring sustainability.
6. **Monitoring and Evaluation:** Establish systems to track water usage, maintenance, and community health outcomes.

Budget:

- Drilling and pump installation: \$15,000
 - Solar panels and energy systems: \$5,000
 - Water storage tanks: \$2,000
 - Community training and capacity building: \$2,000
 - Miscellaneous and administrative costs: \$1,000
- Total Project Cost: \$25,000**

Expected Impact:

1. Over 2,000 residents will have access to clean and safe drinking water.
2. Incidence of waterborne diseases will significantly decrease, improving public health.
3. Women and children will save time previously spent fetching water, which can now be invested in education and economic activities.
4. Increased agricultural productivity as a result of reliable water availability.
5. Strengthened community cohesion and empowerment through active participation in project implementation.

Sustainability Plan: The project includes the formation of water management committees in each village. These committees will oversee the operation and maintenance of the boreholes, with training provided to ensure long-term functionality. Additionally, a small user fee system will be introduced to cover maintenance costs, ensuring financial sustainability.

Conclusion:

By addressing the critical need for clean water, this project will transform the lives of thousands, fostering health, education, and economic growth in the five target villages. With your support, we can ensure that these communities have the resources they need to thrive and build a brighter future.