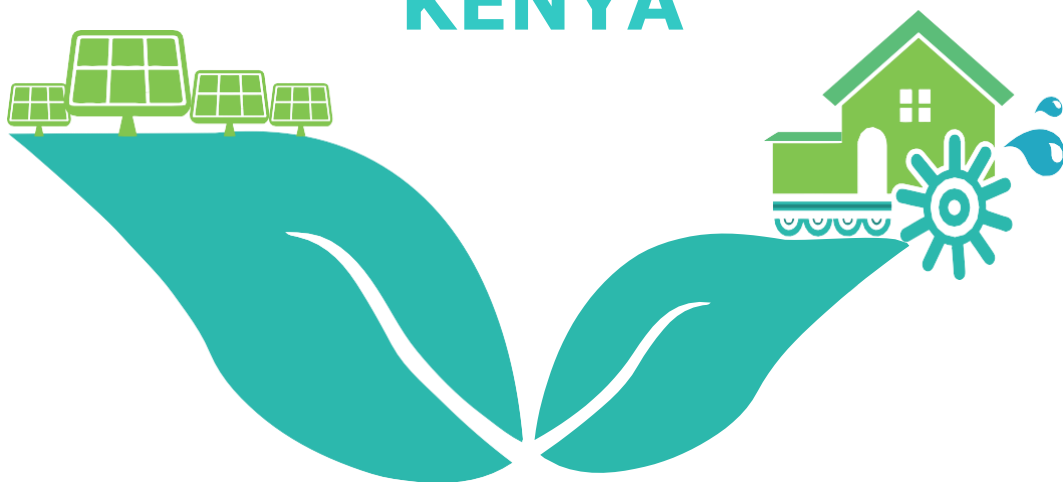


# SUSTAINABLE SCHOOLS

KENYA VOLUNTARY DEVELOPMENT ASSOCIATION

## IMPROVING WATER ACCESS AND HYGIENE PRACTICES IN RURAL PUBLIC SCHOOLS IN KENYA



Member of Global Schools Program (SDGs).



PROYSA ENERGY S.L.

Member of the Building Committee of IIE (Spanish Institute of Engineering)

# Improving Water Access and Hygiene Practices in Rural Public Schools in Kenya



## Background

Public schools in rural Kenya face significant challenges related to water access, including inadequate and unsafe drinking water. This situation has led to poor sanitation and hygiene practices, high absenteeism due to water-borne diseases, and consequently, poor academic performance. Providing reliable water sources in rural schools can significantly improve the quality of life for students and the surrounding community. Access to clean water promotes behavior change, enhances health by reducing water-borne diseases, and improves academic performance by reducing absenteeism.



## The Problem

Kenya, with a population of 54 million, has 15 million people (28% of the population) lacking access to safe water. Increasing water demand and scarcity, exacerbated by climate change, population growth, urbanization, water pollution, and poor water resource management, has created a severe water crisis. This issue is particularly acute in rural areas and urban slums, where piped water infrastructure is often unavailable.

# Improving Water Access and Hygiene Practices in Rural Public Schools in Kenya

## Project Goals

1. Increase Access to Clean Water: Ensure reliable access to clean and safe drinking water for pupils and teachers in rural public schools.
2. Improve Sanitation and Hygiene: Promote better sanitation services and hygiene practices through behavior change training.
3. Enhance Academic Performance: Improve academic performance by reducing absenteeism and increasing student retention.
4. Reduce Water-borne Diseases: Decrease the incidence of water-borne diseases among school children through water treatment and improved hygiene practices.



# Improving Water Access and Hygiene Practices in Rural Public Schools in Kenya

## Current Situation

Number of Beneficiaries:

- Students: 2,850
- Teachers: 100
- Non-teaching Staff: 50
- Surrounding Community: 7,000

Current Water Sources:

- Rivers, most of which are seasonal
- Wells that often run dry during dry seasons

Distance to Water Sources:

- Average distance from schools to water sources: 6 to 12 kilometers

## Impact on Society and School-going Children

Health Improvements:

- Reduction in Water-borne Diseases: Access to clean water reduces the prevalence of diseases such as diarrhea, cholera, and typhoid, leading to healthier students.
- Enhanced Hygiene Practices: Availability of water promotes regular handwashing, reducing the spread of illness.

Educational Benefits:

- Improved Attendance and Retention: Students spend less time fetching water and more time in class, leading to higher retention rates and better academic performance.
- Increased Focus on Learning: With basic needs met, students can focus better on their studies and extracurricular activities.

Community Development:

- Behavior Change: Students and staff trained in good hygiene practices can extend these practices to their homes, benefiting the wider community.
- Sustainable Practices: The project promotes sustainable water use and conservation practices.

Environmental Benefits:

- Kitchen Gardens: Schools can use collected water for gardening, teaching students about agriculture and sustainability, and enhancing the school environment.



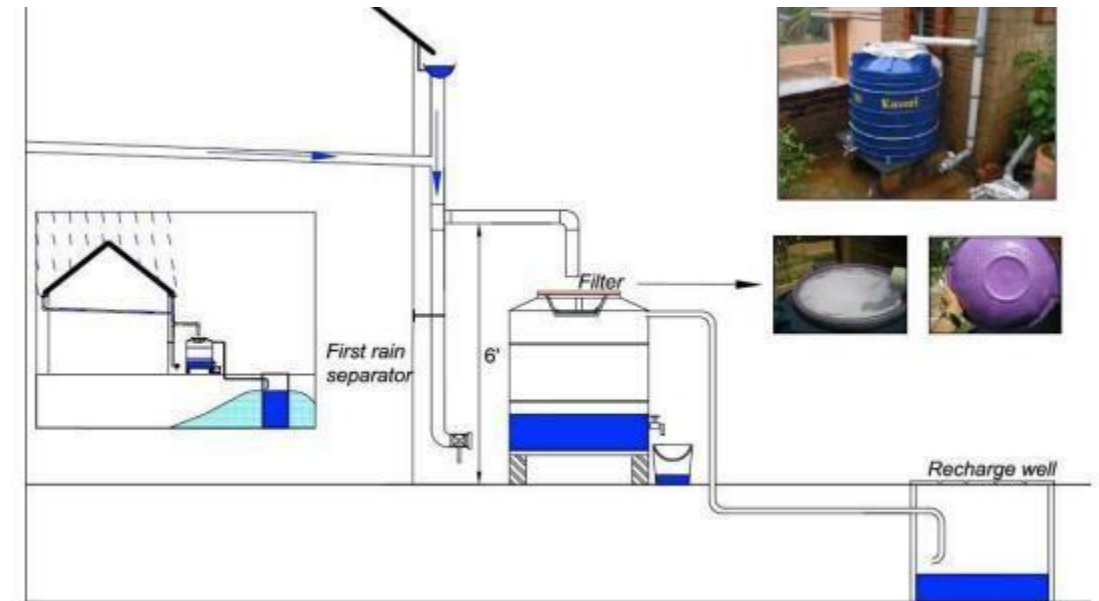
# Improving Water Access and Hygiene Practices in Rural Public Schools in Kenya

## Project Design and Implementation

Components of the Project:

1. Movable Treatment Plant: To treat the water collected, ensuring it is 100% safe for human consumption.
2. Sea Freight and Insurance: To cover the transportation of the movable treatment plant from Spain to Mombasa.
3. Inland Transport: To cover transportation costs from Mombasa to the school.
4. Solar System and Structure: To power the water treatment facilities and ensure sustainability.
5. Water Tanks and Gutter Systems: To collect and store rainwater, meeting the schools' annual water needs.
6. Fence: To secure the water tanks and treatment facilities.

We have identified one school to start offering the service, which will also serve the neighboring community.



### UF3000 PORTABLE POTABILIZER

It treats :Model UFE3000 for fresh water 3000 litres per hour

Model RO/MF 3000 for salt and sea water 400litres per hour

# Improving Water Access and Hygiene Practices in Rural Public Schools in Kenya

## Monitoring and Evaluation

The project's success will be monitored through:

- **Regular Health Check-ups:** Tracking the incidence of water-borne diseases.
- **School Attendance Records:** Monitoring absenteeism and retention rates.
- **Hygiene Practice Surveys:** Assessing changes in hygiene practices among students and staff.
- **Performance Reports:** Evaluating academic performance improvements.

## Budget Summary

<u>Item</u>	<u>Cost (EUR)</u>
Movable Treatment Plant	€19,000.00
Sea Freight and Insurance	€2,200.00
Inland Transport (Mombasa to School)	€2,120.00
Global Giving margin 15%	€ 4.984

## Conclusion

**The proposed project aims to transform the lives of school-going children and the broader community in rural Kenya by providing reliable access to clean water and promoting better hygiene practices. This initiative will lead to improved health, higher academic performance, and overall community development, fostering a brighter future for the next generation.**

### Fence Included in project infrastructure

Solar System and Structure	€2,890.00
Two Water Tanks and Gutter Systems	€1,970.00
Import Duty (10% of the total item cost)	€2,049.00
Contingency 10% of the overall project cost	€3,022.90.00
Total	€38,213.00