

WATER FOR SCHOOLS IN MIGORI COUNTY A PROJECT REPORT FOR SANGO PRIMARY



Children at Sango Primary School enjoying water from a newly constructed well

The Context

This report details the project activities conducted in Migori County, Kenya, with financial support from WellBoring Germany. We extend our gratitude to WellBoring Germany and all their partners for their generous contribution towards the installation of this well.

Migori County faces challenges including low rainfall, frequent droughts, and sporadic seasonal streams. According to the Kenya Demographic and Health Survey 2022, only 53% of residents have access to basic drinking water, and just 18% have adequate sanitation facilities. These statistics highlight a critical need for improved water services in Migori County. A new borewell has been installed, providing safe water to 1,875 individuals in Migori County, including 750 school going children and 1,125 members of the broader community.

The project began on July 31 and was successfully completed on August 13th, 2024.

Community Readiness and Contributions

The success of this project relied on the input and collaboration of community members, despite high levels of poverty. Through a series of calls and site visits, residents shared their knowledge about local water sources, the history of previous seasonal hand dug wells, the needs of the community and their willingness to participate.

This participatory approach meant the well would be optimally located and meet the community's requirements while directly benefiting the learners.

They were also greatly involved with helping in the mobilisation of the machines by helping repair the damaged sections of the road and providing unskilled labour on site, e.g. during pad construction and site clearance.



Installation of surface casing at Sango Primary School

Key project data follows overleaf.

Key Project Data

School Name	Coordinates	Contact Pers & Number	Static water Level/ Yield	Challenges	Student Population	Comm beneficiaries
Sango	-0.668196,34.584222	Charles Otieno 0729353119	SWL – 10.2mts Yield - 4.5m ³ /hr		750	375

Notes:

1. From the table above, SWL means Static Water Level.
2. The Borewell Yield is measured in Cubic Meters per hour (m³/hr).

Maintenance and Sustainability

For long term sustainability, community members were trained on the pump handling techniques, basic maintenance principles and service plan. This enhances the capacity of the people in dealing with minor issues that may arise during the lifetime of the borewell.

Challenges and Lessons

Like other previous projects, we faced some challenges but managed to overcome them. Some of challenges encountered are as below:

1. We encountered long columns of loose conglomerate rock formation that necessitated the use of surface casings. This was a huge challenge given that we didn't envision such and didn't factor it in on our preparation plans. At some point, our drilling rods got stuck but due to the technical know-how and capability, we managed to retrieve rods after

much struggle. We then continued drilling after we had retrieved the rods and acquired surface casings

2. Movement was a major headache due to the poorly maintained roads and harsh weather. For instance, while mobilising, our support truck got stuck several times on the sand mass of the seasonal rivers along the road.

Project Outputs and Outcomes

Generally, the area through which we were carrying out the project is known for low yielding boreholes. Fortunately, the borehole we did had impressive yields of 4.5 cubic meters per hour. The project has reached 750 pupils and 1,125 more people. Here, pupils no longer carry water from their homes nor do they have to fetch dirty water from earth ponds. Other immediate results realized include improving cleanliness in classrooms and pupils: enhancing hand washing practices during critical hours. The anticipated project outcomes are reductions of waterborne diseases, increases in enrolment and attendance, and better academic results. Health clubs, school gardening, and food for lunches, become possible. All of this will increase health, learning and self-esteem among learners.

Water Quality Analysis

Upon completion of drilling, casing and gravelling, the borewells were then developed through flushing (using the scouring action of moving water to help rid a water supply of contaminants). Water samples were each then collected in a one litre bottle and sent to the government laboratory for testing.

The water analysis reports showed the water is suitable for human consumption as per WHO Guidelines & KEBS (KS 459-1:2007) standards.

Pad Completion

After sharing the laboratory results with the beneficiaries - who were very happy - we moved into the last phase of the project. This entailed the pad construction and pump installation of the borewells.



Ongoing Pad Construction



Pump Installation



Pump Installation Underway