



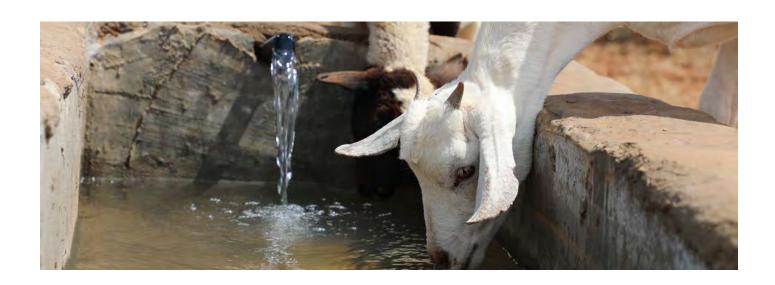
KENYA BOREHOLE PROJECT REPORT 2021







Submitted By	Helping Hand For Relief and Development-Africa	
Submitted To	Helping Hand For Relief and Development-USA	
Program	WATER FOR LIFE PROGRAM	
Project	Construction of Borehole to Provide access to sustained safe water Drinking water for vulnerable communities in Ngatataek Kajiado County, Kenya.	
Objective	To contribute to the improvement of quality of health and life-saving assistance to the vulnerable people through the provision of reliable and sustained access to safe drinking water based on identified strategic water points Kajiado County, Kenya (Targeting over 30,000+ Human beneficiaries and their Livestock numbering r hundreds of thousands)	
Beneficiaries	Drought Affected and Vulnerable Communities	
Project Duration	7 Months	
Location	Ngatataek - Kajiado County, Kenya	
Contact Details	Mr.Musa Ibrahim Regional Director E-Mail: musa.ibrahim@hhrd.or.ke Contact No. +254-722-784-769 YunusYussuf Ibrahim Senour Program Officer:InKind Gifts, WASH & Emergency Response Program E-Mail: yunus.yussuf@hhrd.or.ke Contact No. +254710-770-960,254-721-442-152 Head Office: Corner of Wangapala and Pramukh Swami Rd Parklands, Nairobi www.hhrd.org	



1ESSAGE TO THE DONORS



ssalamu alaikum, Thank you for your generous gift to towards the borehole project. We as an organization together with African communities are happy to have your support. Through your donation we have been able to accomplish installation of a borehole, a water kiosk, a cattle trough and water piping to a Mosque and a Hospital in Kajiado Kenya. The project is benefitting more than 30,000 plus residents.

Through such donations we continue working towards the purpose of the organization.

You truly make the difference for us, and we are extremely grateful!

Today your donation is going toward alleviating health crisis in the location, in specific, water borne diseases that have been a prevalent problem in the area and also solving animal health issues.

Together we are making a difference, your continued support of our mission and vision is deeply gratifying to us, and we hope it is the same for you. We were honored to see the smiles in the faces of benefitting communities. Your gift has already started making an impact.

In Conclusion I will quote W. H. Auden on his illustration on why water is life. "Thousands have lived without love, not one without water." If you have specific questions about our mission as a program (WFL-WASH) be sure to visit our website or reach out to our Head office in USA. May Allah bless our work.

Sincerely. **Br Musa Ibrahim** Regional Director - HHRD Africa



On behalf of WFL-WASH Program, thank you for supporting our mission of realizing equal access of water and sanitation to all people. Your donation for the installation of the borehole in Kajiado is greatly appreciated and important to us realizing UN Sustainable goal number six. With your generous giving the benefits will

reach far more than what you can ever think of, smiles in African families, growth of crops since food grows where water flows, and blessings from Allah. The project will ensure, that the residents are no longer stressed on matters related to adequate water.

Sustainable measures were carried along/discussed and agreed since the start of the project, in conjunction with the benefiting community, as discussed further in this report. Thank you again for your thoughtful gift to the Kenyan community. May Allah bless you all.

Sincerely,

Br Yunus Yussuf Ibrahim

Program Head-WFL-WASH HHRD Africa



 ${f F}$ rom the deepest part of my heart, as I stand here to represent my people, I want to express my gratitude to the donors, for this gift of water.

We are overwhelmed with joy since our problem has been solved. God bless you and HHRD. We are looking foward for more partnerships as we strive to alleviate human suffering.

Sincerely,

Mrs. Florence Waiganjo

CEC- Water Kajiado County

IMPACT ANALYSIS OF THE PROJECT

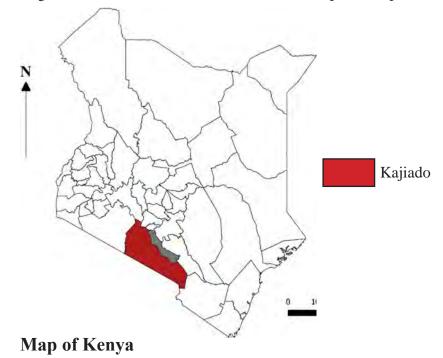
BENEFITS	IMPACT
Over 30,000+ residents are benefitting from the project	Sustainable food farming throug irrigation
24/7 supply of water to the Mosque	Reduce in water borne diseases(Improved community health)
24/7 supply of water to the health facilty	Symbol of community unity thus reducing conflicts
24/7 supply of water to the cattle trough	Immproved animal nutrition
24/7 supply of water to the chiefs office	Improved administration of the area
100 Trees were planted	Improved vegetation cover

BOREHOLE LOCATION

Kajiado County is situated in the Rift Valley and borders Narok and Kiambu Counties to the west, Nairobi and Machakos counties to the north, Makueni and Taita/Taveta counties to the east and Tanzania to the south. It lies between latitude 2.0981S and longitude 36.7820E and has a population of 1,117,840(2019 population census). The County occupies an area of 21,292.7 km2. The County has five sub counties namely Kajiado Central, Kajiado North, Kajiado East, Kajiado West and Kajiado South.

Kajiado County has a total population of 1,117,840 people, of which 557,098 being male, 560,742 are females and. There are 316,179 households with an average size of 3.5 person per household and a population density of 51 people per square kilometer.

The county has four main livelihood zones namely, Pastoral all species, Agro-Pastoral, and Mixed Farming livelihood zones, with population proportions of 52, 12 and 5 percent respectively. Formal employment, casual waged labour and business livelihood zones comprises 31 percent of the population.



Population	1,117,840
Area	21,292.7 km2 (8,221.2 sq mi)
Formed	4 March 2013
Tertiary institutions	18

PROJECT RATIONAL

The people of Kenya according to the United Nations are one of the most struggling populations in the world, with a population of approximately 49 million and an annual population growth of approximately 2.6%, the country's poverty index has also continued to steadily rise.

Water scarcity in Kenya has been an issue for decades, as only a small percentage of the country's land is optimal for agriculture, and the climate is predominantly arid. A natural disaster (drought) also caused major soil degradation and displacement of people throughout the country.

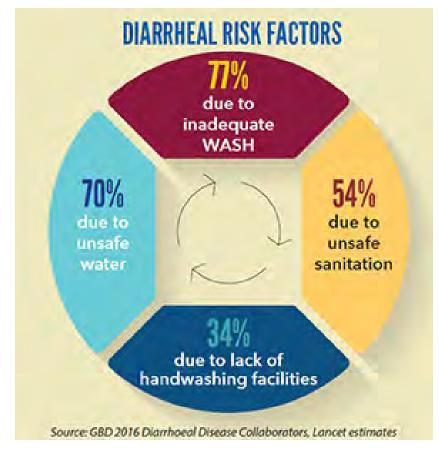
The Country's natural water resources also do not provide an equitable delivery of water to the various regions of the country and the country's water basins do not reach an equitable area of the country. This leaves most of the population without any fresh water. Rapid urbanization has also pushed poor urban dwellers to the slums, where there is no proper water or sanitation, and overcrowding exacerbated the already hazardous health conditions.

The water shortage in the Country also means that a large population of women and children spend up to onethird of their day fetching water in the hot sun from the nearest fresh water source. This backbreaking work leaves roughly half of the country's inhabitants vulnerable to serious dangers. In addition to exposure to the elements and risk of attack by predators, the primary water gatherers are also the most susceptible to waterborne diseases.

PROBLEM STATEMENT

Inadequate access to safe water supply combined with poor environmental sanitation and personal hygiene practices is among the leading causes of diseases such as diarrhea, dysentery, worm infestation, skin diseases, bacterial infection and many other diseases. Water born diseases are the major causes of morbidity and mortality particularly of children and women. The sector goal of providing safe water supply to 100 percent rural population and sanitation services to these communities by this project.

Inadequate and lack of water increased the unhygienic condition in the area which is the cause of certain environmental diseases, and there is a lack of awareness to communities, specially children and women of the area are suffering with unhygienic conditions, there is also the risk of exceeding no of patients due to lack of hygiene awareness.



From the chart, the secod leading cause of diarrhea in Kenya is consumption/use of unsafe water.

This project will significantly reduce this percentage and inturn the disease in the area. Availability of water to the hospital will ensure safe sanitation facilities in the benefitting area and inturn reduce the 54% risk factor.

80 percent of hospital attendance in Kenya is due to preventable diseases and about 50 percent of these illnesses are water, sanitation and hygiene related," according to UNICEF. From this project we will realise a healthy and a productive community in Kajiado.

Residents used to pay five Kenyan shillings (\$0.05) per 20 liters of the vital liquid if they collect and carry it themselves, but the cost quadruples to 20 shillings for deliveries.

<u>PROVISION OF CLEAN WATER & SANITA-</u> TION - VISION 2030

- By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals
 and supply of freshwater to address water scarcity and substantially reduce the number of people suffering
 from water scarcity
- By 2030, implement integrated water resources management at all levels, including through trans-boundary cooperation as appropriate
- By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- Support and strengthen the participation of local communities in improving water and sanitation management.



"Food grows where water flows" - anonymous

KEY GAPS & SITUATIONAL ANALYSIS

Limited purchasing power of the community, Water is sold and most of the community members are not able to purchase.

Residents used to pay five Kenyan shillings (\$0.05) per 20 liters of the vital liquid if they collect and carry it themselves, but the cost quadruples to 20 shillings for deliveries.

The United Nations classifies Kenya as a chronically water scarce country on the basis of having one of the lowest natural water replenishment rates, at 647 meters cubed per capita per annum which is far below the 1,000 meters cubed per capita per annum.

Estimates of water supply in the country indicate that only about 57 per cent of the population has access to safe water.

Approximately 80 percent of hospital attendance in Kenya is due to preventable diseases and about 50 percent of these illnesses are water, sanitation and hygiene related.

PROJECT ACTIVITIES

- •Baseline survey
- •Proposal development & approval
- •Formation of water committee
- •Identification & selection of site with community
- •Geological & hydrological survey
- •Getting drilling permit
- •Request for quotation of companies
- •Selection & hiring of contractor
- Drilling permit
- •Mobilization of Drilling equipment & Installation
- •Developing and Testing of equipment
- Provision and Installation
- •Solar panel (Solar pump & controller)
- Generator
- Security (Fencing)
- •Main Tank
- •Construction of structure (holding the tank & store the equipment for protection)

SUSTAINABILITY PLANS

The project has a potential for sustainability of the various activities after the initial funding. The key pillars of sustaining the activities will be based on the following factors.

- •The money paid by the people fetching water will be used to maintain the project in terms of equipment, Services and maintenance.
- Project ownership and Management by Project Water Management committee.
- •Business orientation and Management training of Local WMC.



PROJECT IMPLEMENTATION PROCESS

HHRD Africa team in Kenya carried out detailed need assessment of the location where there were large number of drought affected and vulnerable communities who have no access to safe drinking water, after assessment a draft of the proposed Project with budget. The Project proposal was based on a systematic approach with integrated terminologies to meet the need of the vulnerable communities by providing them access to safe drinking water through the Construction of Borehole. HHRD also oriented field team, Community leaders, Gatekeepers and other relevant stakeholders to carry out day to day activities for smooth implementation of the project.

HHRD Team involved the community in identifying site for the Borehole, after site selection several meetings have been carried out with community as Broad base community meetings, focus group discussions and series of dialogues with community mobilization techniques and after that the team formed COS (Community Organizations), after formation of COs HHRD formulated WMC's (Water Management Committee) and signed TOP (Terms of Partnership) with community for the better implementation, community participation and sustainability of the Project, HHRD conducted market survey for Borehole contractors and got quotations from different contractors, after comparison of quotations, HHRD selected the best contractor among them who had enough experience of work and a good working profile, improved quality of work and modern drilling techniques.

HHRD signed the agreement and work order with contractor for the construction work and the contractor completed the work as per the agreed duration.

HHRD with the Assistance of an Engineer With a professional input by a Geologist developed a standard Bill of Quantities (BOQ) which was shared with the contractor.

<u>ACHIEVEMENTS</u>

- Sustainable food farming through irrigation
- Reduce in water borne diseases(Improved community health)
- Symbol of community unity thus reducing conflicts
- Immproved animal nutrition
- Imroved school attendace
- Improved administration services in the area
- Improved vegetation cover
- Improved productivity of land
- Imprioved economic status of the residents
- 100 trees were planted along side the project
- wastewater use in irrigation
- Meeting water supply and demand in the area

LESSONS LEARNT

- Importance of community participation: accept and understand the need to fully involve all members of a community in the planning and implementation of a water and sanitation project.
- The role of women: Women and children generally carry the burden of water collection
- Involving communities in identifying and planning projects is time-consuming and cannot be rushed.
- If water is a strongly perceived need, then communities will be prepared to make significant time and labour contributions.
- The full potential of health benefits to communities will only be achieved if the provision of water is accompanied by hygiene promotion and sanitation.



PHOTO GALLERY LAUNCHING









CONSTRUCTION













CONSTRUCTION











INAUGURATION























































