



GLOBAL GIVING REPORT

SONDU WATER ENTERPRISE

DECEMBER 2016

Safe Water & AIDS Project

Email: info@swapkenya.org

Website: www.swapkenya.org

P.O. Box 3323-40100 Kisumu.

Tel (+254) 20-2030712/ 0738039901/ 0714761268

Main office: Off Aga Khan Road, Behind Royal City Hotel, Milimani Estate.

Table of Contents

| | |
|--|----|
| 1.0 Introduction: | 3 |
| 2.0 Problem Statement: | 3 |
| 3.0 Reasons for raising funds from Global Giving | 4 |
| 4.0 Achievements made with Global Giving between October and December 2016 | 6 |
| 4.1 Training | 6 |
| 4.2 Bicycle for Water Operator | 7 |
| 4.3 Handing over of 60 liters drinking water bucket | 7 |
| 4.4 Hand Cart with Jerry Cans | 8 |
| 4.5 Fencing, security gate and reinforcements..... | 9 |
| 4.6 Monthly water Quality testing | 9 |
| 4.7 Other General Achievements..... | 11 |
| 5.0 Way forward | 11 |

1.0 Introduction:

Safe Water and AIDS Project (SWAP) is a Kenyan registered NGO, with its headquarters in Kisumu and implements public health programs, research and emergency response in 6 counties in Western Kenya. SWAP aims to improve the health and socio-economic status of vulnerable communities through disease prevention, and socio-economic empowerment. SWAP's mission is to improve the quality of life of the vulnerable population by supporting them to develop profitable health oriented micro-enterprises. In partnership with the Sondu community members, the Ministry of Health, Ministry of Water, Siemens Stiftung and Skyjuice Foundation, SWAP established the Sondu Water Enterprise which was formally launched in July 2016. Community health promoters were trained on safe water systems and they assisted to mobilize the communities, while they promote and sell household water treatment and soaps.



Water collection point at the kiosk



Water filter chamber at the kiosk

2.0 Problem Statement:

Sondu is a community with high burden of disease and with diarrheal illness as one of the leading causes of morbidity and mortality. This is due to poor water and sanitation practices and limited access to improved services. The Sondu river where communities used to draw water from for household use is highly contaminated. The improved water supplies in Sondu are limited with irregular and interrupted services. There was no public toilet in the market area where the Sondu Water Enterprise is located. The main objective of the Safe Water Enterprise, is to increase access to clean and safe drinking water and sanitation for the community. The enterprise is managed by a local water operator and is run under the supervision and guidance of SWAP.



Human and animal activities at the river source

3.0 Reasons for raising funds from Global Giving

SWAP was provided the sky-hydrant filtration unit by Sky-juice Foundation and an initial start-up budget and technical support from Siemens Stiftung to launch the enterprise. However, SWAP realized that there were a lot of pending requirements and improvements needed as well as ongoing operational costs. It also needed more investment and time before the center can be sustainable.

The Ministry of Health recommended that the market area where the enterprise is situated needed a public toilet. This toilet was build and serves the community members around the market.



Public toilet at the water kiosk

SWAP addressed their partners, donors, friends and well-wishers to donate through Global Giving and received two disbursements as follows:

- 1) USD 6,118.65 – September 30th 2016
- 2) USD 900 – October 31st 2016

Following several management meetings to prioritize the most urgent requirements, SWAP management settled on the following, which needed to be addressed.

- Social Marketing Training of different community groups and community health promoters in Sondu
- Bicycle for the Water Operator to help market the services
- 60 liter water drinking vessel to place next to the kiosk for walk ins and school children
- Hand Cart with jerry cans to assist in deliveries to household, schools, clinics and hotels
- Fencing and installation of a gate for security reasons.
- Reinforcement of the metal stand for the 5000 liters tank, to ensure the stand is stable and can carry the weight when the tank is filled. .
- Installation of a lockable safety box for the water generator
- Monthly Quality water testing of the water sold to the communities

- Monthly Wages of the water operator and security operator
- Monitoring visits by the Management Team of SWAP and ongoing mentoring
- Provision of cleaning materials, toilet tissue, hand washing soap.

4.0 Achievements made with Global Giving between October and December 2016

4.1 Training

Training was done for 17 community representatives including community administrative leaders and community health promoters. The training team comprised of Siemens Stiftung Staff and SWAP's Research Manager, Training Manager, Director Program and Research and an Intern. The training was held in Sondu for two days.

The training included the following topics:

- Introduction to Marketing;
- Social Marketing
- Promotion of safe drinking water
- Principles of social marketing;
- Marketing tools
- Social marketing intervention strategies
- Developing of a social marketing plan.



Participants at the two days training

4.2 Bicycle for Water Operator

The bicycle for the water operator was procured to enable him to do the social marketing of the Sondu Water Enterprise, to reach out to clinics, schools, hotels and other businesses around the market and to facilitate his movement to come in time to the center. Because of the hot climate, community members collect water as early as 6 am and the operations can continue during evening hours. The handing over of the bicycle was done by the Research Manager SWAP to the Water Operator of the Sondu Water Enterprise on the 6th of December 2016.



SWAP Research Manager (left) handing over a bicycle to Water Operator

4.3 Handing over of 60 liters drinking water bucket

On the 6th December the Research Manager presented 60 liters bucket to the water operator. The bucket will be used to store safe drinking water for the school children and walk-ins who request for water.



A 60 litres bucket for storage of drinking water

4.4 Hand Cart with Jerry Cans

This hand cart will be property of Sondu Water Enterprise and will be used to help deliver water to households and businesses in the market place around the Sondu Water Enterprise. This was made locally and will support the marketing and sustainability efforts.



Handcart for supplying and vending safe water

4.5 Fencing, security gate and reinforcements

The fencing of the water kiosk was required to improve security of the enterprise. It needed first some ground work of designing the plan, searching for quotations and negotiations with suppliers and laborers. There was an attempt to steal the generator from the river site. A metal box has been made which can be lockable to avoid theft. The water tank could also not be filled to its capacity due to weak materials used because of limited funds. The water tank has now been reinforced and the water operator is able to fill the 5,000 liters tank to its maximum capacity. SWAP will be able to show pictures of the final fence and gate, since it is currently work in progress which should be complete before end of December. All the materials are procured and brought to the site and SWAP management members are making frequent monitoring visits.



Construction of fence using concrete poles

4.6 Monthly water Quality testing

The purpose of the monthly quality assurance and testing is to ensure that the water provided to the community meets the highest quality standards test. For this reason, monthly samples of the water at the main taps are taken for quality control and analysis. This is done at SWAP's water lab. Below is the SWAP's Lab Manager, conducting the tests in SWAP's water lab. SWAP is able to do bacteriological and full chemical analyses..



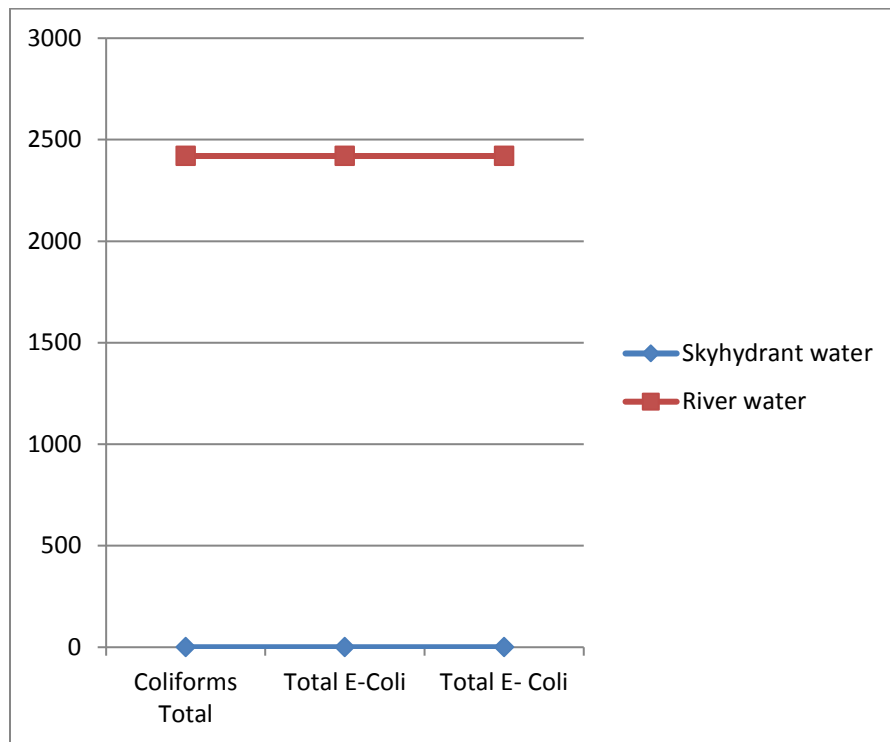
SWAP's Water Quality Laboratory

Below are results of the full chemical tests

| Sondu Sky hydrant water-Tap water 1 | | | | | | | | |
|--|------------------|-------------------------|----------------|-----------------|-------------------|---------------|---------------|----------------------|
| Lab Sample ID # | Parameter | Units | WHO STD | KEBS STD | MCL (mg/L) | Test 1 | Test 2 | Result (mg/L) |
| L_001 | Magnesium | mgMg ²⁺ /L | max 100 | max 100 | max 100 | 4.1 | 3.88 | 4.0 |
| L_002 | Calcium | mgCa ²⁺ /L | max 100 | max 250 | max 250 | 8.1 | 8.1 | 8.1 |
| L_003 | Chloride | mgCl ⁻ /L | max 250 | max 250 | max 250 | 23 | 23 | 23.0 |
| L_004 | Total Hardness | mg/CaCO ₃ /L | max 500 | max 500 | max 500 | 9 | 9.3 | 9.2 |
| L_005 | Nitrite | MgNO ₂ /L | max 0.1 | max 0.003 | max 0.003 | 0.045 | 0.045 | 0.0 |
| L_006 | Nitrate | MgNO ₃ /L | max 10 | max10 | max 10 | 0.949 | 0.949 | 0.9 |
| L_007 | Fluoride | MgF ⁻ /L | max 1.5 | max 1.5 | max 1.5 | 0.2 | 0.378 | 0.3 |
| L_008 | PH | | 6.5-8.5 | max 8.5 | 8.5 | 7.9 | 7.6 | 7.8 |
| L_009 | Temperature | °C | 25°C | 25 | 25 | 25.6 | 26 | 25.8 |
| L_0010 | Turbidity | NTU | max 5 NTU | max 5 | max 5 | 0.49 | 0.49 | 0.5 |
| L_0011 | Total Alkalinity | mg/CaCO ₃ /L | max 500 | | | 59.4 | 59 | 59.2 |
| L_0012 | TDS | ppm | max 1500 | 1000 | 1000 | 740 | 764 | 752.0 |
| L_0013 | Color | mgPt/L | max 5 | max 15 | max 15 | 0 | 0 | 0.0 |
| L_0014 | Conductivity | | | 2500 | 2500 | 241 | 241 | 241.0 |

Overall results- All the parameters meet the required Standards

Bacterial results



The above result shows significant bacterial reduction that meets the WHO standards.

4.7 Other General Achievements

- The German TV crew came to the Sondu Water Enterprise to make a documentary about the work of Siemens in Western Kenya. They filmed on the 18th of October 2016 and SWAP's team was available to support.
- SWAP applied for the Maji Performance and Innovations Award (MaPIA) 2016 which described the work at Sondu Safe Water Enterprise. SWAP became finalist and was invited to attend a gala dinner and award ceremony during the closure of the 1st Kenya Water Week on the 24th of November 2016. SWAP's Country Director attended this event.
- SWAP participated in the celebration of Global Hand Washing day on the 15th of October, 2016. Handwashing was promoted at the Sondu water enterprise by use of the hand washing station next to the public toilet.

5.0 Way forward

- In January 2017, SWAP will pay annual Business permit to the County Government. .
- SWAP will continue to invest in marketing, capacity building and community engagement to enhance ownership and efficient running of the center.
- Monthly monitoring will be ongoing as well as water quality testing of the water.

- Strengthening of partnerships with WASH partners and attending of stakeholders forums.