



## **GLOBAL GIVING REPORT**

**JUNE 2024**

### **Help protect 1,000 health workers in Western Kenya**

#### **1.0 Introduction**

Safe Water and AIDS Project (SWAP) has been operating in Western Kenya since 2005 with public health programs, research and emergency response. SWAP's mission is to provide innovative solutions for improved health and economic status of communities. SWAP has a wealth of experience in public health interventions and has worked in collaboration with County Health Management Teams to respond during disease outbreaks and disasters.

#### **2.0. Justification for SWAP's Interventions in Migori County**

Migori County is in South western Kenya. In the 2019 census, Migori County had a population of 1,116,436 with 43% of the population living below the poverty line. Migori County has been prone to cholera outbreaks. SWAP collaborated with health stakeholders and Migori County Department of Health to support the cholera preparedness plan and to ensure readiness for a cholera outbreak in advance so that the response can be more effective. Preparedness will lead to a faster, more efficient response and therefore reduce both morbidity and mortality due to cholera.

Since July 2023 Migori County had been experiencing increased number of diarrheal cases out of which a total of 101 were laboratory confirmed as cholera. The patients were majorly admitted in the Migori County and sub county hospitals. 5 deaths (case fatality rate of 4.9%) were reported.

Besides cholera, Migori County was this year also affected by flood due to erratic rains, back flow of Lake Victoria and which put the population even at higher risk of other waterborne disease outbreaks.

One of the key pillars of the cholera preparedness plan where SWAP was able to intervene was the enhancing infection prevention and control (IPC) practices in health care facilities. This through improving IPC and WASH Infrastructure and procuring commodities in Health Care Facilities as well as Training Health Care Workers.

### 3.0 Background of STREAM Chlorine Generators at Health Care Facilities

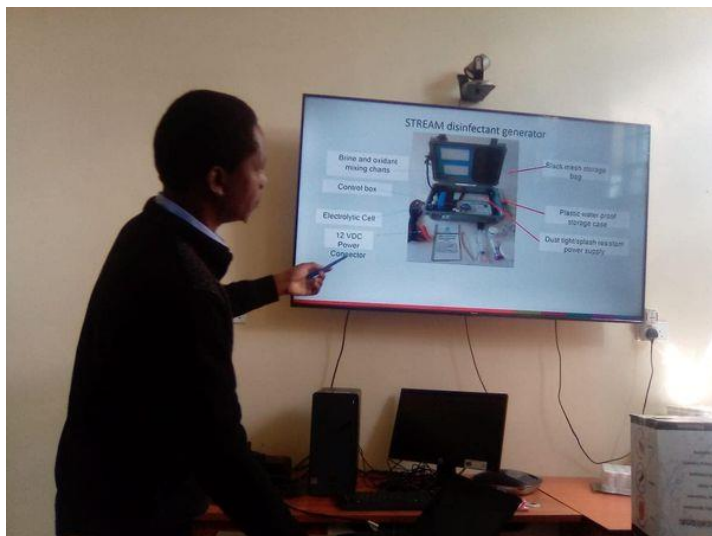
SWAP already had a wealth of experience during the COVID-19 pandemic in Kisumu County to support health care facilities with chlorine generation through the installation of STREAM chlorine generators and training of the health care workers, followed by joint monitoring. One of the STREAM Chlorine generators is within SWAP's water lab to generate chlorine for internal use, for emergencies and to support some of the facilities. This became extremely useful during the cholera outbreak in the informal settlements where SWAP produced chlorine for the health care facilities, isolation room and police post.



Figure 1: Lab Manager testing STREAM Chlorine Generator

### 4.0. Chlorine Generations in Migori County

SWAP introduced the proposed project of installation of two more STREAM Chlorine generators at Migori County Referral Hospital and Macalder Sub County Hospital to the County and Sub County Health Management Teams for their approval and support. Follow up visits were made to identify the teams to be trained and the room to be used as production unit. The STREAM generators were donated to SWAP and were initially tested at the lab. In May 2024, a one-day training was held at both selected facilities. In total, 54 people were trained comprising of Public Health Officers, Clinicians, Lab Technicians, Nurses, Infection Prevention and Control Focal Persons, Health Records Officer, Biomedical Engineers and support staff. The training was on how to do the production, maintenance, distribution, use and benefits of chlorine for infection prevention and control. Standard operating procedures were documented and shared as well as monitoring tools. From previous experience with ongoing production, the facilities can produce up to 1,000 litres of chlorine per month and distribute this to all patient care areas and support neighboring facilities as well. Only water, electricity and salt are required and vinegar for cleaning purpose.



*Figure 2 Introduction of STREAM chlorine generator to County Health Management Team*

Following training, the STREAM chlorine generators were installed and production started. As part of the start up, the facilities were provided with a step down transformer, salt and vinegar, buckets and jerry cans, weighing scale and extension cable, stirring rod and lab coat.



*Figure 3 Demonstration of STREAM chlorine generator to Hospital Management Team*

## 5.0. Health and Economic Impact of STREAM Chlorine Generators

Chlorine is a commonly used disinfectant which can inactivate both bacteria and viruses. It is recommended to use in health care settings, which is especially important to prevent hospital acquired infections and disease outbreak from spreading. All patient care areas, frequently touched surfaces must be cleaned and disinfected minimum once per day and other areas after each use. It is also used for disinfecting latrines used by patients and health care workers. Health care facilities often lack sufficient supply of commercial chlorine, due to procurement and transport logistics or lack of funding. This will put patients and health care workers at risk. With the STREAM chlorine generator, the facilities can with minimal ongoing funding for supplies (salt and vinegar), produce their own and be self-reliant with continuous uninterrupted supply of chlorine. They can also be prepared and support any future disease outbreaks to mitigate the impact and prevent the spread.



Figure 4: *Beneficiary of the STREAM Chlorination Project*

**WE THANK YOU FOR YOUR ONGOING SUPPORT AND DONATIONS**