



SAFE WATER AND AIDS PROJECT (SWAP)
Annual Report - 2017



Safe Water and AIDS Project (SWAP)
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LIST OF ACRONYMS

ANC	Ante Natal Care
BMGF	Bill & Melinda Gates Foundation
CCT	Conditional Cash Transfers
CDC	Center for Disease Control and prevention
CHV	Community Health Volunteer
HCM	Health Communication Marketing
HENNET	Health NGO Network
ICC	Interagency Coordinating Committees
KEWASNET	Kenya Water and Sanitation Civil Society Organization Network
KEMFRI	Kenya Marine and Fisheries Research Institute
KEMRI	Kenya Medical Research Institute
LCC	Life Cycle Cost
MCH	Maternal Child Health
MSR	Mountain Survey Research
MOU	Memorandum of Understanding
NTD	Neglected Tropical Diseases
NGO	Non-Governmental Organization
PNC	Post Natal Care
POC-CCA	Point of Contact Circulating Cathodic Antigen
RAND	Research and Development
RCT	Randomized Control Trial
NIH	National Institute of Health
SWAP	Safe Water & Aids Project
SBCC	Social Behavior Change Communication
SWASH+	School Water Sanitation and Hygiene plus Community Impact
SWTU	Solar Water Treatment Unit
USAID	United States Agency for International Development
UNICEF	United Nations Children's Emergency Fund
WSUP	Water Sanitation for Urban Poor
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization



FROM THE COUNTRY DIRECTOR'S DESK

The year 2017 marked a history in Safe Water and AIDS Project following the transition of the founding member and former Country Director Ms. Alie Eleveld taking up the role of Technical Advisor in July 2017. Alie was the Country Director for 11 years and instrumental in growth of the organization from 4 staffing members to over 40 employees. SWAP significantly grew programmatically and conducted numerous research trials leading to over 30 publications to date. This was courtesy of cordial relationship with partners including, research institutions, donors, Government of Kenya and community at large.

The year saw tremendous growth in collaborative partnership between SWAP and its partners. SWAP entered into new agreements with RAND Corporation, Northwestern University, Siemens Foundation, PATH, SORT, Wild Geese Foundation, Centre for Diseases Control and Prevention (CDC), University of Illinois at Chicago, Stanford University and Stockholm Environment Institute.

At the national level, SWAP became the board chair of Health NGO Network (HENNET). Other networks that SWAP is an active member included Kenya Water and Sanitation Civil Society Organization Network (KEWASNET), Interagency Coordinating Committees (ICCs) on Environmental Sanitation and Hygiene and Community Health Strategy and a steering committee member of the Neglected Tropical Diseases (NTD). At the County and Sub County levels, SWAP is a member of stakeholders' forum and technical working groups on Environmental Health and Sanitation; Water, Environment, Irrigation and Natural Resources; and Western Kenya Humanitarian Hub.

SWAP operated mainly in Western Kenya across five Counties namely Kisumu, Siaya, Migori, Vihiga and Kakamega. It has continued to participate and supported Public Health events such as observing Malaria, Water, Hand Washing and Toilet Days. The Country experienced a cholera outbreak in more than half of the 47 Counties. SWAP supported Ministry of Health in two counties with prepositioned supplies to control the spread of the disease.

To increase efficiency and effectiveness of work, several capacity building opportunities took place and staffs were given equal chances to participate in them. They included governance for Non- Governmental Organizations, Monitoring and Evaluation, Communication, Human Resources and Development, Proficiency Testing and Inter-laboratory comparison evaluation, Kenya Integrated Rapid Assessment, Gender Mainstreaming, Qualitative Research and Coding, Strategy Deployment, International Consulting and Water, Sanitation and Hygiene (WASH) learning forums.

SWAP has established a water quality laboratory that underwent final stages of accreditation. The lab has the capacity to test both bacteriological and full chemical analyses of water. Several partners made use of the services at the water lab such as Kisumu County Department of Health during cholera outbreak, Water Sanitation for Urban Poor (WSUP), Kenya Marine and

Fisheries Research Institute (KEMFRI), Real Relief, Siemens Foundation, Stanford University, PATH, Mountain Survey Research (MSR) and University of Illinois at Chicago.

The general election which is held every 5 years took place on second Tuesday of August as enshrined in the Kenyan Constitution. Political campaigns were heightened mid the year but that culminated to demonstrations and violent protest following the disputed presidential results. The Presidential petition at Supreme Court nullified the results and a new Fresh Presidential Election date was set. Campaigns coupled with demonstrations and protests lasted close to three months and this impacted negatively in SWAP operation areas because normal businesses were paralyzed following running battle between the protesters and security agents.

One of the research projects that work closely with Nurses at Public Health Facilities was adversely affected following a nationwide strike that lasted for five months. The vulnerable population had difficulties seeking health care services since majority of these health facilities were closed down reversing the gains to improve the quality of life specifically for women and children.

To all our readers, staffs and partners, I take this opportunity to wish you a happy and prosperous 2018.

Alex Mwaki

FROM THE TECHNICAL ADVISOR'S DESK



2017, the 12th year of operations has been a turbulent year with ups and downs. In June 2017 I stepped down as Country Director and handed over the leadership to Alex Mwaki, who has been our loyal board member for over a decade and recently joined as Director Program and Research of SWAP. I will continue offering technical support on part time basis and will remain board member of SWAP.

We continued to diversify our donors and partners and in 2017 with attracting major donors such as CDC, NIH, RAND, Wild Geese, Vivatos Foundation, Stanford University, PATH, Siemens and University of Illinois.

We are extremely grateful to those partners and donors who remained loyal and supportive for many years, such as Bill and Melinda Gates Foundation, Stockholm Environment Institute, Liverpool School of Tropical Medicine, Procter & Gamble, Population Services Kenya, USAID, Harber Charitable Foundation and other private well-wishers.

We are excited to share with you that we have received two international awards in 2017 as recognition of our work. These are the Women in Business Worldwide; Best Public Health Initiative 2017 Western Kenya and the Health Care and Pharmaceutical Award – Best Public Health NGO 2017.

As committed board members of HENNET, the National Health NGO Network, SWAP was elected this year for the National Chair position. HENNET stimulates the linkages between Health NGO's, Private Sector and the Ministry of Health. This has strengthened our partnership

with the Ministry of Health and has enabled us to join a number of national forums and engage with donors and partners.

Sadly we lost one of our most loyal employees, Sitnah Faith, who was Study Supervisor for the past 10 years in a tragic road accident. We are raising funds to support the young children she has left behind with education and school requirements. We miss her experience, skills, energy, wisdom and smile.

The second half of the year was very challenging with the Nurses Strike which affected one of our studies, the prolonged elections with frequent violent demonstrations. This has led to the postponing of a number of studies and as such affected our cash flow.

I am very proud of our committed employees who have been determined to ensuring that donor funded activities continue as much as possible despite the challenges and who showed their passion for the vulnerable communities they serve. A big thank you as well to our board members, who have been supportive and a source of inspiration.

Best wishes for 2018.

Alie Eleveld

SWAP's VISION, MISSION AND CORE VALUES

Vision

A healthy and empowered community where everyone enjoys high quality life.

Mission

To provide innovative solutions for improved health and economic status of communities

Core values:

- We progressively look back, and use those experiences to determine our future direction.
- We are resilient, and adapt to positive and negative changes and needs in society.
- We ensure integrity in staff, by having controls, systems, processes in place and practice zero tolerance to corruption.
- We strive for better results & high productivity in products and services, and excellent execution of our duties.
- We believe in maximizing the skills and expertise of our human resource in the delivery of health interventions and research, providing quality, efficient and effective services.
- We strive to provide result oriented health services, minimizing costs and maximizing outputs.
- We are innovative, and change is our constant. We embrace the unknown and are willing to go the extra mile to achieve our goals.

- We embrace diversity among staff, partners, and stakeholders. We always ensure there is a positive spirit which underpins the way we interact with others.
- We always promote honesty, trustworthiness, and transparency in all that we do.

COMMUNICATION

Facebook: www.facebook.com/Safe-Water-and-AIDS-Project-338690551549/?ref=hl

Twitter: @swapkenya

Website: <http://www.swapkenya.org/>

ACKNOWLEDGEMENTS

SWAP would like to acknowledge the financial, technical and moral support of the below listed organizations and individuals. We sincerely appreciate your donations and support.

- Ministry of Health
- Ministry of Education
- Ministry of Water, Environment and Natural Resources
- Centers for Disease Control and Prevention (Atlanta and Kisumu)
- CDC Foundation
- KEMRI
- SWAP Board of Directors and Management Team
- Population Services Kenya
- UKAID/DFID
- Gates Foundation
- Procter & Gamble Children Safe Drinking Water Program
- Hasbah Kenya
- CARE Kenya /US
- PATH
- World Health Organization
- Stockholm Environment Institute
- Liverpool School of Tropical Medicine
- Stanford University
- University of Illinois at Chicago
- Maseno University
- Tufts University
- Duke University
- Northwestern University
- Shadrack and Company
- Siemens Stiftung
- Global Giving
- Wild Geese Foundation
- Hoog tijd voor Andersom
- Innovations in Health Care
- Social Innovations in Health Initiative
- HENNET
- KEWASNET
- Western Kenya Humanitarian Hub
- Harber Charitable Foundation
- Gabriele Norado
- SORT
- Louise St. Louise – Financial expert
- Quantum Industrial Laboratories
- Water Sanitation for Urban Poor
- Real Relief
- Kenya Marine and Fisheries Research Institute
- Mountain Survey Research

1 PROGRAMS

1.1 REPORT FROM TECHNICAL ADVISOR

1.1.1 Transition from Country Director to Technical Advisor

Alie Eleveld, founding member and previous Country Director of SWAP after 12 years handed over the leadership to Alex Mwaki in a colorful ceremony held on the 30th of June 2017 at the SWAP premises. Alex Mwaki former CARE Kenya employee had served in the SWAP board for over a decade and was in the past year employed at SWAP as Director Program and Research. Alie continues to serve SWAP on part time (50%) basis in the capacity of Technical Advisor and Board Member. Alie traveled to Germany in July 2017 to undertake a course at the University of Heidelberg on International Health Consulting and plans to venture into public health consulting. In August 2017, upon return from Europe she assumed her new role as Technical Advisor.



Figure 1: SWAP Management Team

1.1.2 Technical Advisor's key responsibilities

Key responsibilities for this new position are summarized as follows:

- Provide high quality technical guidance, oversight and assistance to program and research activities. This includes forecasting and on the job mentoring and capacity building of staff.
- Act as Country Director during absence or leave of Alex Mwaki
- Respond to calls for proposals

- Attend regular staff, management and board meetings to provide overall technical direction.
- Review documentation and strategies on the dissemination of research findings
- Monitor compliance with donor specific MOU's and contracts
- Provide guidance on the review of strategic plan and work plans
- Preparation of budgets and budget tracking
- Ensure quality financial reporting is done as guided by donors/MOU's
- Approval of budgets and authorization of bank transactions
- Represent SWAP on national and international forums
- Represent SWAP as the National Chair for HENNET, the Health NGO Network
- Develop new partnerships and maintain effective working relations with all partners, donors and international networks.
- Co-investigator on the CDC Schistosomiasis Trial
- Co-Investigator on the Cups or Cash for Girls Trial
- Lead consultant for the WASH PATH Stanford University Study
- Contact person for the Dutch partners and donors

1.1.3 Partners and donors

During the reporting period, SWAP was involved with various donors and partners negotiating contracts, writing proposals and preparing budgets, attending meetings and conference calls. This led to various new proposals and contracts whereby SWAP is the implementing partner.

1.1.3.1 RAND Corporation– Science of Behavior Change.

Rand Corporation received funding from National Institute of Health (NIH) for an Early Childhood Development (ECD) study with SWAP as implementing partner. There have been several conference calls, submission of budgets and justifications. The study was to start in 2017 but got delayed due to the prolonged election and will start in January 2018.

1.1.3.2 CDC – “Defining cut-offs for the point-of-care circulating cathodic antigen (POC-CCA) assay in areas of low schistosoma mansoni prevalence in western Kenya”

The Technical Advisor is co- investigator and main contact person in this study. The activities started late due to delay of setting up SWAP in the payment management system and release of first funding. SWAP established a Urine and Stool Lab for this study. Year 2 grant was approved starting October 2017. The total funding is for 5 years, but approval done annually.

1.1.3.3 CDC FOUNDATION – PROCTER AND GAMBLE - Establishment of a certified water quality laboratory in Kisumu, Kenya

SWAP received initial funding from Procter and Gamble Safe Drinking Water Program, with the aim to improve the lab in preparation for the accreditation process. More funding was released by CDC foundation to support the actual accreditation process. It is a long process which requires many different partners.

1.1.3.4 CDC – Qualitative Research – WASH Study Kibera

SWAP negotiated with CDC Nairobi on offering qualitative research services for a WASH study in Nairobi. This includes Focus Group Discussions, transcribing and coding. This was approved but the start date is not yet known.

1.1.3.5 CDC – Qualitative Research – Aflatoxin Study Busia

SWAP negotiated with CDC Nairobi concerning offering qualitative research services for an aflatoxin study in Busia. This includes Focus Group Discussions, transcribing and coding. This is awaiting feedback.

1.1.3.6 LIVERPOOL SCHOOL OF TROPICAL MEDICINE / KEMRI/CDC - Cups or Cash for Girls Trial

The Technical Advisor is co- investigator in the cups or cash for girl's trial. SWAP is working in partnership LSTM, KEMRI and CDC to implement this study in 84 day secondary schools of Siaya County. It has four study arms including moon cup only; cash only; moon cup and cash and control arm. By end of the reporting period, 10 trial management group meetings have been held. SWAP negotiated with Northwestern University for additional funds for small group sessions. This was granted and funds received. Equity Bank account set up by SWAP for this purpose is responsible for the cash transfer.

SWAP's team has trained girls on puberty, hygiene, financial literacy, use of moon-cup and completed a WASH survey in all the 84 selected schools. Small group sessions with leaders were completed in the four Sub Counties but will continue in 2018. SWAP staffs benefited from 3 days training on qualitative research analysing and coding facilitated by Linda Manson from Liverpool School of Tropical Medicine.

1.1.3.7 STOCKHOLM ENVIRONMENT INSTITUTE (SEI) – BILL AND MELINDA GATES

The study involves "Conditional cash transfers to retain rural Kenyan women in the continuum of care during pregnancy, birth and postnatal period" in 48 health facilities of Siaya County. This antenatal care study is in phase II. SWAP negotiated a no cost extension due to delays during the 5 months nurses strike which affected the study. SEI team was received to negotiate for a new contract and submitted budgets for the same. The trial coordinator for this study is SWAP's current Data Manager.

1.1.3.8 PATH / STANFORD UNIVERSITY/MSR GLOBAL HEALTH - Venturi Chlorine Doser

SWAP is the lead consultant and provided oversight to the inline chlorination of water in 7 water kiosks that were identified in the study. There was a lot of review of tools and documents. A negotiation between SWAP and Stanford University was made for an amendment of the MOU with better payment terms.

The research team conducted sales pitches and monitoring the performance of chlorine dosers installed at 7 community water kiosks. There were bimonthly conference calls with all the

partners and SWAP received various visitors (engineers from MSR Global Health, PATH team and students from Stanford University)

1.1.3.9 PATH – Saving lives at birth award – SE - Flow chlorine generator

PATH applied together with SWAP as implementing partner for the Saving Lives at Birth Award. This is a scale up of a previous pilot that involved testing the SE Flow chlorine generator at health facilities which can be utilized for water treatment and for cleaning the labour ward and elsewhere to prevent infections. SWAP provided input in the proposal and PATH was notified about winning the award.

1.1.3.10 UNIVERSITY OF ILLINOIS AND PORTES FOUNDATION – Solar powered water disinfection unit study

SWAP participated in an earlier pilot testing the performance of the solar powered water disinfection unit, negotiated a contract and received initial funding. Students from UIC assisted during the pilot. I travelled to Amsterdam to collect the study supplies which were brought by a student from the University in Chicago. The main study will kick off in January 2018 and in February we plan to start a follow up study now also assessing the health impact/reduction of diarrheal illness. The Research team participated in several conference calls and submitted budgets, and provided input on the proposal.

1.1.3.11 SIEMENS – Sky hydrant monitoring

Negotiated a contract with Siemens Stiftung for SWAP to undertake the monitoring of 5 sky-hydrant filters in Western Kenya. SWAP did quarterly water sampling for bacteriological testing and once for full chemical testing.

1.1.3.12 SIEMENS – Global Giving

With seed funding from Siemens, SWAP established the Sondu Water Enterprise. Additional funds were raised from Global Giving through crowd funding. Every quarter, SWAP prepared reports for online submission to the Global Giving website.

1.1.3.13 WORLD VISION / PROCTER & GAMBLE CHILDREN SAFE DRINKING WATER PROGRAM / CDC-

The programs main objective is “Evaluation of water treatment practices and WASH coverage of clinics and schools in 12 counties in Kenya. SWAP will assist with this study in Kisumu and Homabay Counties. Submitted budgets and had several conference calls. Study planned to start in January 2018.

1.1.3.14 PSK – HEALTH COMMUNICATION AND MARKETING PROGRAM– USAID funded sub award.

The Sub Award is being implemented in Migori County. Participated in review of reports and work plans for activities in Migori County. Attended several site visit meetings and audits from PSK. Key focus areas are on prevention of malaria, diarrheal illness and case management.

1.1.3.15 OVC and emergency support

Harber Charitable Foundation (HCF) – is one of SWAP’s loyal donors since 2006 supporting Orphans and Vulnerable Children of pay their school fees and emergency response.

Another similar funding is received from Gabriele Norado, a private well-wisher. This year, there has been support for Orphans, widows, cholera and flood response.

1.1.3.16 HOOG TIJD VOOR ANDERSOM / WILD GEESE – Chiela women group

Through our partnership with Dutch Foundation Hoog Tijd voor Andersom, SWAP managed to apply for a matching grant from Wild Geese in the Netherland, to support, Chiela Women, a group of fish mongers with a boat, fish cages and capacity building. Monthly reports are reviewed and prepared. A final report will be submitted in January 2018.

1.1.3.17 VIVATOS – WASH in school

SWAP was approached by this Dutch new foundation to present a WASH project for funding. The director of the foundation was referred by the Dutch Embassy. They raised funding which enabled the installation of 5,000 litres plastic water tank and two (250 litres) hand washing stations.

1.1.3.18 PROCTER AND GAMBLE AMBASSADOR - St Ignatius wash project Molo

A Procter and Gamble ambassador reached out seeking support for one of the projects in Molo. SWAP supplied P&G Purifier of water and demonstrated how to use it, offered training on safe water and social marketing and did a situation analysis of the water situation including testing of the sources.

1.1.3.19 SORT – Capacity building

Through the partnership with KEWASNET, Kenya Water and Sanitation Network, SWAP was notified of an opportunity to apply for a capacity building opportunity with SORT. This chance was only for 4 NGOs and SWAP emerged as one of the awardee. This led to a consultant working on improvements of the strategic planning which was incomplete. A SWOT and satisfaction survey was done and revision of the mission statements and setting objectives. This is still work in progress with input required from the Management Team. A strategic planning report will be finalized January 2018.

1.1.3.20 HENNET – The National Health NGO Network

SWAP has been a member and board member of this national network since 2009. During its 2017 Annual General Meeting (AGM), SWAP was elected as National Chair of HENNET.

HENNET’s mission is to stimulate linkages and strategic partnerships among health NGO’s, government and private sector in order to enhance their responses towards health needs of Kenyans. The opportunity to become the National Chair is a major milestone for SWAP and presents opportunities for engagement with the government and donors and other organizations in the health sector.

SWAP participated in the following meetings with support from HENNET

- Quarterly HENNET Board Meetings
- HENNET AGM which elected SWAP as National Chair
- GAVI – 3 days forum on Immunization with participants from 25 countries
- Inter -Agency Coordinating Committee from the Ministry of Health for the Community Strategy and Immunization
- Breakfast meeting at the Crowne Plaza themed “Unlocking Kenya’s Economic Potential through Investment in Research and Development of Health Technologies
- Health Financing meeting in Nairobi with the Ministry of Health

1.1.3.21 Key other meetings attended by technical advisor

- Monthly staff meeting held every first Monday of the month
- Monthly Management Meetings
- Monthly research meetings
- Quarterly SWAP Board of Directors Meeting including the AGM held on 5th of December 2017
- Western Humanitarian Hub meetings on Flood response, cholera response and election preparedness
- Kisumu County Water Investment Conference – participated in discussion panel on 29th November 2017
- KEWASNET Launch in Nairobi

1.2 HEALTH COMMUNICATION MARKETING (HCM) PROGRAM

SWAP renewed its partnership with PSK in October 2016 after winning a 5 year HCM sub-award, focusing on improved health through increased uptake of Water treatment and Malaria products and services in Migori County. SWAP signed a 5 years Memorandum of Understanding with PSK for implementation running October 2016 to October 2021. During year one implementation, SWAP focused its interventions in Migori County, specifically in Nyatike Sub County. Most of the planned activities were conducted successfully as per the work plan. Pending activities for Nyatike Sub County included; Exit meetings with the CHVs, Dissemination meetings with the County and sub county Ministry of Health officials and end line survey. SWAP is set to implement HCM activities in Uriri for year two. During the implementation, SWAP opened an office in Nyatike which stored health products and were distributed by the community health volunteers, who conducted Social Behaviour change communication (SBCC) which enhanced product promotion. SWAP through collaborative effort with other partners and MOH built capacities of the CHVs in program areas including social marketing.

1.2.1 Lessons Learnt

- Involvement of CHVs in planning made meetings and engagements successful.
- Using already existing structure i.e. community health strategy made work easier and faster.
- Maintenance of open communication enabled the CHVs to consult whenever necessary thus ensuring quality work.
- Feedback on work done encouraged the CHVs to keep up their good work and motivated others to do better.
- Frequent follow-ups, coaching and monitoring visits to the CHVs built their confidence and enhanced their self-esteem.
- Working with experienced CHVs minimized data collection errors during the data collection period.



Figure 2: Water Source in North Kadem, Nyatike Sub County

1.2.2 Challenges

- Slow entry process and commencing late implementation of activities.
- Getting previous data (2014) from the health facilities was not easy.
- Some health facilities didn't have community units linked to them.
- The distances between the facilities are long and the terrain in the area makes travelling more expensive.
- The vastness of the area made the CHVs not to meet the recommended number of Households i.e. 100 per CHV. Some had as low as 20 Households.
- Community members were not willing to give out their telephone numbers during SGCs due to political reasons.
- Health related competing activities i.e. engagement of CHVs by other partners.

1.3 ORPHANS AND VULNERABLE CHILDREN AND WIDOW SUPPORT

SWAP continued to receive financial support from Harber Charitable Foundation (HCF) and other well-wishers like Gabrielle and Tom to support Orphans and widows. Through the support we were able to respond to emergencies like Cholera outbreaks, Medical support and Funeral support. Funding reduced slightly in 2017 as compared to 2016. This therefore made us focus more on specific orphans who are under full sponsorship. We mainly supported their education and upkeep. Most of the orphans are in the secondary, college and university level. Below is a table showing categories and statistics of those supported.

Table 1: OVC, WIDOW AND EMERGENCY SUPPORT

Type of support	No supported
Orphans supported	20
Widows/widowers supported	5
Medical support	19
Funeral support	7
Community support	5
Needy families	2
Cholera response	2
TOTAL	60

1.4 MUMIAS SUB DISTRIBUTORS

SWAP has continued with Sub Distributors Center in Ekero which sold P&G products to traders. Hasbah Kenya Limited is the supplier of products. Sales of the products varied between KES 1.3 to 1.8 million per month. The Sub D Center is sustainable and brings in little profit to the organization. SWAP benefits by getting discounts and bonuses from Hasbah Kenya Limited. One of the sales and marketing officer disengaged from SWAP and a new female Sales and Marketing Officer was hired in November.

1.5 SONDU WATER ENTERPRISE

Sondu Water enterprise continued to provide access to clean and safe drinking water and sanitation for the vulnerable community. The enterprise was being managed by a local water operator and is run under the supervision and mentorship of SWAP. Sondu water enterprise has acted as an education center for local secondary students and community members. Within the year, SWAP constructed a public toilet to address the sanitation needs at Sondu Market, which is around the water enterprise. A provision of handwashing station was also made as a demonstration site for handwashing and hygiene. The enterprise uses the Sky hydrant filtration technology. Raw water is pumped from the river and collected in a water tank after which it is filtered through the membranes of the sky hydrant filtration unit. It is then channeled to outlets and sold to the communities at an affordable rate.



Figure 3: Sondu Water Kiosk

1.6 CHIELA WOMEN GROUP PROJECT

The group is based at Dunga Beach and has a membership of seventeen women. Chiela Women Group seeks to improve their living standards and support their families through fish trade. SWAP through funding from Hoog Tijd voor Andersom and Wild Geese has supported the women to build a boat and a fish cage to enable them become self-reliant and reduce risks of getting into negative behaviors like having sex for fish. This was done through mentorship and training and monitoring to the women. The women are now involved in income generating activities through the boat which is used for local tourism at the beach. They also own a cage with a capacity of holding 5,000 fingerlings. The women were trained on Business skills, Record keeping, ecotourism and women enterprise, planning, sustainability, HIV/AIDS, safe water and sanitation, group dynamics.



Figure 4: Local tourists using Chiela women group boat

1.7 CARE CONSULTING

SWAP consulted for CARE on the continuation of the expanded and extended School Water Sanitation and Hygiene plus Community Impact (SWASH+) phase II project. The goal for the SWASH+ Phase 2 supplement is to support the Government of Kenya to provide sustainable and scalable WASH in schools, through partnership, data, evidence, and technical support. The objectives include: Decision-makers have access to data on use and sustainability of urban school sanitation options; Decision-makers have access to data on costs for urban school sanitation options; and the MOE has clear policies and procedures for procuring and regulating private sector sanitation services in schools. The project is funded by Bill and Melinda Gates Foundation for the period between October 2016 and March 2019. A set of SWASH+ Phase 2 supplemental activities included the following:

1.7.1 Activity 1. Extended Urban Private Sector Trial

- 20+ schools in informal settlements in Nairobi
- Government standard versus private sector (Fresh Life Toilets, FLT) provision – maintenance, costs, cleanliness, use, user preferences, management and governance
- Open-source publication on findings of the study

1.7.2 Activity 2. Urban Life Cycle Cost (LCC) Study

- Utilizing the protocol used in SWASH+, the team will collect LCC data from the 20 schools included in the private sector trial in Nairobi County. We proposed to collect WASH costing data from approximately 90 urban public, private primary and secondary schools across four counties (Nairobi, Nakuru, Kisumu, and Mombasa). Additionally, to develop a tool that will provide stakeholders with a simple platform to inform budget estimates for WASH facilities that meets minimum standards.
- Open-source publication on findings of the study

1.7.3 Activity 3. Development of Guidelines for Schools on Private Sector Sanitation Provision

- Literature review on current private sector sanitation options (Kenya/East Africa/global)
- Data collected via in-person interviews from key stakeholders in Nairobi, Nakuru, Kisumu, and Mombasa Counties
- A workshop before and after drafting of the guidelines to get feedback
- Final approval of guidelines from National government officials.

In 2017, Data on use and sustainability was twice collected during the second term (May to July) and third terms (September to October) of the school calendar in 20 urban private sector trial schools of Nairobi City County. In December, the Consultant met with County Director of Education in Kisumu to gather details of schools in the urban areas both public and private and discuss the proposed WASH costing data collection.

The development of guidelines for procurement of private sector sanitation service in schools was a recommendation from the private sector trial. The drafting was supposed to start in the last quarter of 2017 but it was delayed to January 2018. Sanergy, Emory and Consultant drafted the plan. Ministry of Health's division of Environmental Health organized the 3rd learning forum on 18th October 2017 at the Hotel Intercontinental, Nairobi. The theme of the learning forum was: **WASH in Kenya: From Research to Policy to Practice**. The first presentation in the learning forum was on the Life Cycle Costs of Water, Sanitation and Hygiene Access in Kenyan Primary School. The Division of Environmental Health with support from UNICEF organized a National School WASH TWG on 15th September 2017 at the Lord Errol Hotel in Nairobi. In the meeting, the Consultant provided a brief of the SWASH + II continuation plan.

2 NETWORKS AND PARTNERSHIPS.

2.1 Memberships

SWAP is a member of the following networks;

- SEAD and Innovation in Healthcare
- Social Innovation in Health Initiative
- Health NGO Network (HENNET). Elected Board Chair in 2017
- WHO international Network of Household Water and Storage
- Kenya Water Civil Society Network (KEWASNET)
- National Environmental Sanitation and Hygiene Inter Agency Coordinating Committee
- National Community Health Strategy Inter Agency Coordinating Committee
- National Immunization Inter Agency Coordinating committee
- Various MOH facilitated technical working groups and emergency hub.
- County WASH Networks
- Western Humanitarian Hub

2.2 Visiting organizations and donors in 2017

- Liverpool School of Tropical Medicine
- Stockholm Environmental Institute
- Siemens Stiftung
- Harber Charitable Foundation
- Population Services Kenya
- Stanford University
- University of Illinois at Chicago
- Northwestern University
- Centers for Disease Control and Prevention
- KEMRI
- PATH
- Global Giving

- University College London
- Mountain Survey Research (MSR)
- SORT
- Hoog Tijd Andersom
- KEWASNET

2.3 National and International Forums

The table below shows the various national and international forums attended in 2017.

Table 2: National and International Forums

DATES	FORUM	WHERE
7 TH to 9 TH February 2017	2 ND National Sanitation and Hygiene conference themed “Accelerating access to adequate and equitable sanitation and Hygiene for all and end open defecation in Kenya”	Safari park hotel, Nairobi
15 TH to 17 TH March 2017	Social Entrepreneurship Accelerator at Duke (SEAD) Summit	Duke University Durham, North Carolina-USA
20 th March 2017	Launch of KEWASNET – Kenya Water and Sanitation Network	Silver Springs Hotel Nairobi
20 TH to 21 ST March 2017	6 TH Annual Forum -Innovations in Healthcare	Monaco Hotel, Washington DC- USA
29 th to 30 th March 2017	Health Investment Forum	Kisii University
4 TH to 5 TH April 2017	School Water, Sanitation and Hygiene plus Community Impact (SWASH+) Annual Review Meeting	Silver Springs Hotel, Nairobi
19 th April 2017	Community Health Strategy Inter Agency Coordinating Committee Meeting (HENNET)	Silver Springs Hotel, Nairobi
29 th May 2017	Ministry of Health – Health Financing Meeting (HENNET)	Silver Springs Hotel
30 TH to 31 ST May 2017	Health Communication and Marketing Program meeting	Great Rift Valley Lodge & Golf Resort, Naivasha
7 TH to 8 TH June 2017	National Environmental Sanitation and Hygiene Inter Agency Coordinating Committee Meeting	Boma Inn Hotel, Eldoret

DATES	FORUM	WHERE
19 – 23 rd June 2017	UN Training Gender Mainstreaming	Starbucks Hotel, Eldoret
13 th September 2017	Meeting “Unlocking Kenya’s Economic Potential through Investment in Research and Development of Health Technologies (HENNET)”	Crowne Plaza Nairobi
15 TH September 2017	National School WASH Technical Working Group Meeting	Lord Eroll Hotel, Nairobi
19 th – 21 st September 2017	GAVI International Forum with representatives from 25 different countries and platforms (HENNET)	West-lands - Nairobi
18 TH October 2018	3 RD Learning Forum by Ministry of Health themed “WASH in Kenya: from Research to Policy to Practice	Intercontinental Hotel, Nairobi
29 th November 2018	Kisumu County Water Conference	Acacia Hotel Kisumu
29 TH November to 1 ST December 2017	Health Communication and Marketing Program meeting	Kilifi Bay Beach Resort, Kilifi
6 TH to 7 TH December 2017	11 TH Annual Neglected Tropical Diseases Conference themed “ Partnership towards achievement of the global goals for the control, elimination and eradication of NTDs	Sarova Panafric Hotel, Nairobi.

3 RESEARCH

3.1 CUPS OR CASH FOR GIRLS TRIAL (CCG)

SWAP implemented the CCG study in 84 day secondary schools in Siaya County. The CCG study’s overall objective was to conduct research on menstrual provision to improve girls schooling and health. This study brought together different partners namely Liverpool school of tropical medicine, CDC, KEMRI, SWAP and the government of Kenya (GOK) and Equity bank. SWAP’s key responsibilities as an implementing partner included training of the girls on puberty, hygiene, menstrual cup use and financial literacy depending on the study arm, provision of cups and cash training, community meetings, small group session, conducting WASH surveys at 84 schools reporting and dissemination. The study’s focus was in Siaya, and covered 4 Sub- Counties namely Alego, Ugenya, Ugunja and Gem Sub- Counties targeting 3862 girls in 84 day schools. The Study had 4 Arms namely; Cash, Menstrual Cups, Combined (cash and cups) and the control arm.

3.1.1 Activities done relating to schools

- MOE and MOH discussion and input on proposed activities
- Principals participated in randomisation
- Meeting with parents/girls, parents' consent
- Girls (school) Health Day at start, mid- and end-study
- HIV, HSV-2 testing, anthropometric, socio-behavioural surveys
- Health centres provide HIV/HSV-2 treatment and care
- Girls, teachers, parents focus groups discussions
- Provided girls intervention, train on use, follow-up
- Evaluated school WASH, attendance, spot checks on use
- Small group sessions were conducted to stakeholders in 4 sub- counties in to develop programme materials
- Mop-ups training on-going.

3.1.2 School Training

Between January and October, the training team managed to visit all the 84 target schools. The schools closed for a longer time due to elections and school visits by the team resumed in September. The first few weeks of September saw the teams do mop-ups in different sub-counties. There was a long break after the activities stopped due to the school holidays.

3.1.3 Staff Training

Dr. Leah from Northwestern University took the team through a 3-day (12th -14 September, 2017) training on Evaluation and Improvement Science: Facilitators & barriers to successful adoption of menstrual Hygiene Management Education. The team was able to identify stakeholders and developed a logical framework to be used in the evaluation process for the CCG study. Consequently, the team picked on the Small Group Sessions strategy to be used for the evaluation and came up with possible questions targeting the following stakeholders: girls, parents, teachers and other leaders.

SWAP staffs benefited from 3 days training on qualitative research analysing and coding facilitated by Linda Manson from Liverpool School of Tropical Medicine.

3.2 AFYA CREDIT INCENTIVE FOR IMPROVED MCH OUTCOMES

SWAP scaled up Afya Credit study after a successful pilot (Phase 1) which was done in six facilities in Alego Usonga Sub County in Siaya County. Stockholm Environment Institute (SEI) received funding from Bill and Melinda Gates Foundation (BMGF) to scale up a trial study from 200 women in the pilot phase to 7,200 women.

The aims of the study is to assess the impact of cost-effectiveness, and scalability of conditional cash transfers (CCTs) to promote increased and uninterrupted contact between pregnant women and the formal healthcare system for improved maternal and child health outcomes in Siaya County in Kenya.

The study is a cluster randomized controlled trial (cRCT) in Siaya County, Kenya. The intervention tested is a conditional cash transfer to women for Ante Natal Care (ANC) health visits (up to 4 visits), a facility birth and Post-Natal Care (PNC) visits until their newborn reaches 1 year of age (up to 6 visits). The study participants are pregnant women identified and recruited at their first ANC visit (n = 7200), and their subsequent newborns. Mothers and their children are followed up at all health visits, at the facility delivery and at 3 additional time points: 5-10 days after enrolment, 2 weeks after the expected due date if they have not delivered in a facility, 6 months after the expected delivery date and 12 months after birth. Study partners include;

- Bill and Melinda Gates-**Donor**
- Stockholm Environmental Institute- **Principal investigator**
- Safe Water and AIDS Project- **Implementing Partner**
- Ministry of Health- **Technical Support (*Identification, Verification and Confirmation of study participants*)**
- Nailab- **System Developer**
- Safaricom- **Mobile money transaction**
- University College London (UCL) Global Health Institute- **Health Economic Evaluation**
- Maseno University Ethical Review Committee – **Review and Approval of Protocol**

3.2.1 Activities conducted in 2017

3.2.1.1 Leaders orientation meeting

An introductory workshop was held in Siaya County with participation of a total of 77 members of the County Health Management Team (CHMT) and the 6 sub-counties health management team, within Siaya County.



Figure 5: Leaders Orientation Meeting

3.2.1.2 Facility Randomization

The randomization exercise was held on 27th March 2017 and attended by County Director of Health (CDH), County Health Records Officer (CHRO) and representatives from each of the 6 sub counties in Siaya County including, Alego Usonga, Bondo, Rarieda, Gem, Ugunja and Ugenya. During the exercise, a total of 48 facilities were randomized.

3.2.1.3 Central Nurses Trainings

Nurses' trainings were held between 21st April 2017 and 12th May 2017 and each of the 48 randomized facilities was represented by either facility in charges or a nurse attached to MCH.

3.2.1.4 Facility trainings and gadget deployment

Immediately after central nurses training, all the other nurses in 48 facilities were trained at the facility and en terminal (Nailab) for enrolment data transmission were deployed to the facilities and immediately enrolment of the participants commenced.

3.2.1.5 Quality Check and Quality Assurance (QC/QA).

A routine monitoring to reach out and assist the nurses in the event of any technical issues with the system/ gadget as well as to conduct quality checks on system data in the portal and to validate whatever we have in the system with what is recorded in the registry book as well as participant's consent log form has been ongoing since the onset of enrolment.

3.2.1.6 Continuous Trainings and Orientation:

Due to staff turnover in some facilities, a continuous trainings and orientation to newly engaged nurses in the affected facilities has been ongoing. This is mostly happening in partner supported facilities.

3.2.1.7 Nurses and participant's reimbursements:

As per the protocol, reimbursement of nurses and incentives to the participants has been ongoing since the onset of enrolment.

3.2.1.8 Phone survey calls (5-10 days after enrolment):

This has been an on-going activity since the onset of enrolment. The main aim of this data is to capture the socio demographic information of the participant as well as their perceptions on the study and the type of services they receive from the facilities they attend to.

A total of 1000 participants have been interviewed so far.



Figure 6: Card reader deployment at health facility

3.3 SCHISTOSOMIASIS STUDY

2017 saw a new collaborative initiative between Safe Water & AIDS Project (SWAP), Kenya Medical Research Institute (KEMRI) and the United States Centers for Disease Control and Prevention (CDC) and Ministries of Health and Education (MOH and MOE) to conduct studies on control strategies for schistosomiasis (bilharzia) in western Kenya. Bilharzia continues to be a significant cause of morbidity and an important public health problem among communities that reside around Lake Victoria. . The study title is **“Defining cut-offs for the Point-of-Care Circulating Cathodic Antigen (POC-CCA) assay in areas of low *Schistosoma mansoni* prevalence in western Kenya”**.

This was a one year study located in two counties namely Siaya and Kisumu with a study population of 30 primary schools that began in the month of March. Active field work began in April with training of staff, study participants and stakeholders. Study participants specifically were school going children of age 9-12 years. It has been observed that Bilharzia has the highest prevalence among school age populations hence a reduction of prevalence in this age group positively impacts the whole population.

The main objective of the study is to evaluate a new diagnostic technique for bilharzia, the point-of-care circulating cathodic antigen (POC CCA) test as an alternative to the currently used Kato-Katz test that has various limitations. Methodology includes comparing the performance of this new test to Kato-Katz pre- and post- treatment, using stool and urine samples collected from school children who have the highest prevalence, suffer significant morbidity and who are the target group for control and elimination of bilharzia.

In summary, 30 schools were identified, enrolled and participated in the study. Stool and urine samples were collected; microscopy and data entry done. Average participation for stool sample collection at baseline was 92.7% while urine was 96.8%.

Ministries of Health and Education officers provided good support; challenges experienced were solved on site and or with consultations. Data analysis is yet to begin and follow up session has been scheduled for May 2018.

Findings from this study will help to understand how the new test performs compared to Kato-Katz and will be critical in guiding programmatic decision-making from mapping to assessment of the impact of control interventions such as treatment and post-intervention surveillance. Improved diagnosis will benefit both local communities and also other areas where bilharzia is endemic.



Figure 7: Lab Technicians practicing new skills at the laboratory training

In addition, three staffs represented the organization at the annual Neglected Tropical Diseases conference in Nairobi that resulted in enhanced publicity for future partnership engagement.

3.4 WATER LAB

SWAP established a water laboratory in 2007 supporting the research activities with technical support from CDC researchers. The ultimate aim was to establish a certified water quality laboratory that receives accreditation from all relevant authorities. In March 2016, SWAP received financial support from Procter & Gamble's Children Safe Drinking Water Program through CDC Foundation to improve the lab according to national certification standards in order for the Laboratory to be certified by the Ministry of Health and the Kenya National Accreditation Service (KENAS). The tasks were to; procure lab equipment, strengthen laboratory infrastructure, ensure lab maintenance and proper ventilation and develop marketing and branding materials. These improvements and eventually the accreditation will enable SWAP to commercially provide the service of the water lab to external partners, clients and MoH for the purposes of research, quality assurance and surveillance. Additionally, it will enable the lab to generate income and become self-sustaining and less donor dependent.

In 2017, the laboratory improved its infrastructure; major lab equipment for the analysis was bought, laboratory reagents; Improvement of Laboratory accommodation environmental conditions and electrical improvement. The laboratory electrical supply was boosted up by new power line from Kenya Power Company which enabled the lab to run efficiently.

The Laboratory has a capacity to process and analyze about 60-70 samples per day. The technology used in the lab is ISO 9308 specifies a method for the enumeration of *E. coli* and *coliform* bacteria in water using Colilert reagents and ISO 9308-1:2014 membrane filtration method technology (*coli*-blue broth).

SWAP's water lab offer services using modern HACH equipment to analyze real time analysis in water to her clients at cost Kenya Shillings 7,000 and 3,000 for full chemical and bacteriological analyses respectively. During the reporting period, SWAP laboratory had opportunity to analyze water samples for the following projects as part of sustainability

- Siemens Project analyses were done using the lab drawn from 6- sites of Kisumu, Nandi and Homabay Counties.
- St Ignatius of Loyola Parish - Molo Project
- Water Sanitation for Urban Poor (WSUP),
- Kenya Marine and Fisheries Research Institute (KEMFRI) and International Institutions collaboration with University of Wisconsin-Madison, Global Health Institute
- Laboratory has been used by University of Illinois students (UIC) during the study to Evaluate solar-powered drinking water treatment in Kisumu County, Kenya.
- PATH and Stanford University to evaluate automated chlorination in urban Kenya (MSR Venturi study).



Figure 8: SWAP Lab Manager and Stanford University student in the lab

3.5 UNIVERSITY OF ILLINOIS – SOLAR POWERED WATER TREATMENT STUDY

SWAP collaborated with University of Illinois (UIC) as implementing partner in a research project that aims to evaluate a potentially sustainable solar powered ozonation system that disinfects 60 liters of water per hour.

A solar-powered water treatment unit (SWTU) EP Pure 1000 Units which was developed by a multidisciplinary team consists of faculty with backgrounds in public health, civil engineering, electrical engineering, water policy and global development economics.

The project is a pilot study that would evaluate the use of such units in 10 randomly selected households/families living in Kisian Village within Kisumu West Sub-County. Each family will receive a SWTU to use as a supplemental water treatment method. The study is set to begin in January 2018. As at the end of 2017, there were extensive laboratory tests; EP unit fixing and other preparation.

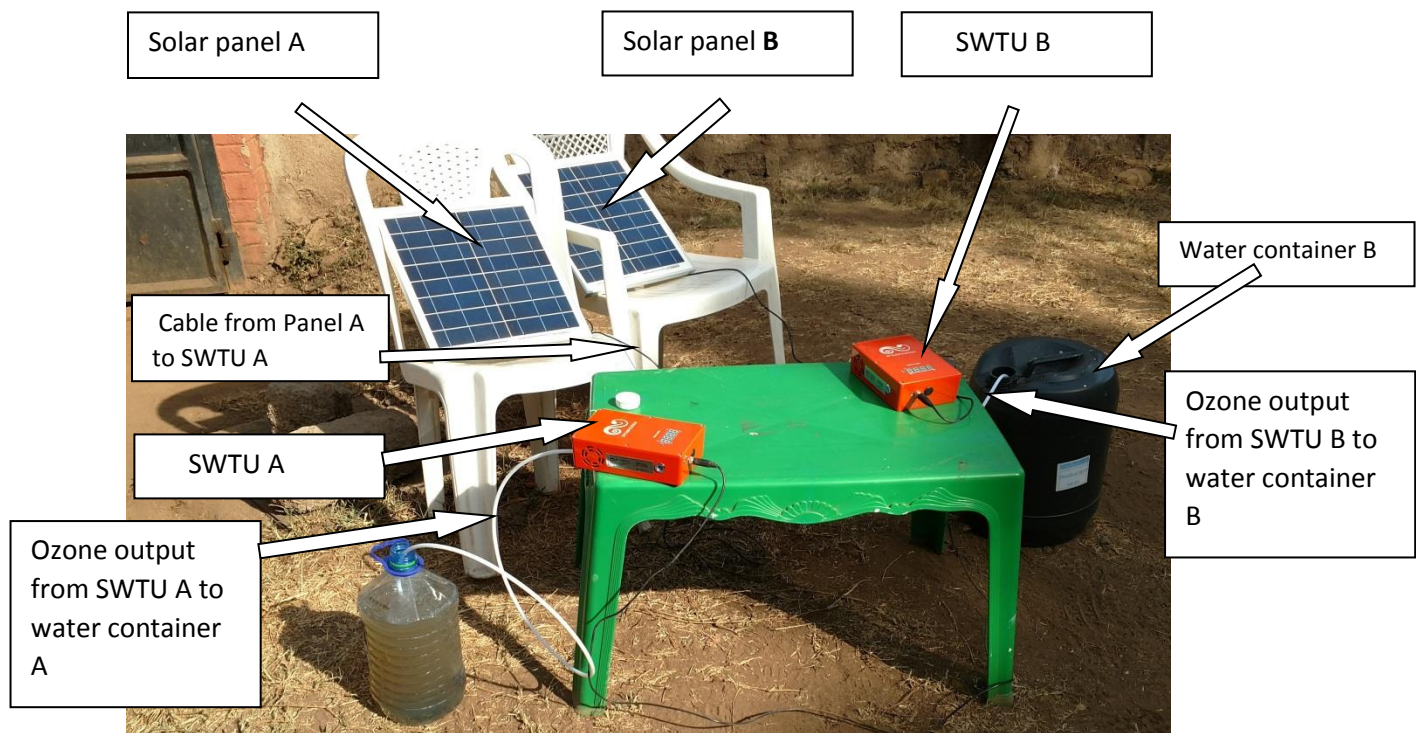


Figure 9: SWTU systems in operation at SWAP

3.6 SIEMENS PROJECT

SWAP in collaboration with Siemens Stiftung and SkyJuice Foundation established a water Kiosk in Sondu market to help the community around Sondu get safe drinking water. In 2017, SWAP got the funding from the Siemens Stiftung to conduct quarterly water tests and some technical monitoring of Safe Water Enterprise sites in Kisumu, Nandi and Homabay Counties. This was done successful as water samples for bacterial testing were taken to the lab for analysis for all the sites.



Figure 10: Safe Water Enterprise by Siemens Stiftung and SkyJuice Foundation

3.7 STANFORD UNIVERSITY/PATH – MSR VENTURI STUDY

SWAP in partnership with Stanford University evaluated an automated chlorination in urban Kenya. PATH and MSR Global Health developed a novel chlorine doser in collaboration with Stanford University for disinfection of piped water supplies. The doser does not need electricity and is designed to deliver a consistent dose of free chlorine to water flowing through the device at a range of flow rates typical for public kiosks in Kenya. The device works by using a principle of fluid dynamics called the venturi effect. Water flows through the device and sucks in the appropriate amount of liquid chlorine to dose the water. The chlorine doser has been tested extensively in the lab at MSR Global Health under a variety of conditions and flow rates (10-40L/min), as well as at kiosks in Kisumu, Kenya.



Figure 11: MSR Venturi



Figure 12: Water Kiosk fitted with MSR Venturi

Below is an illustrative test results from a kiosk in Kenya that show the device dosing between 1ppm and 1.5ppm free chlorine over a flow rate range of 20-40L/min. These results are well within the targeted performance of the doser.

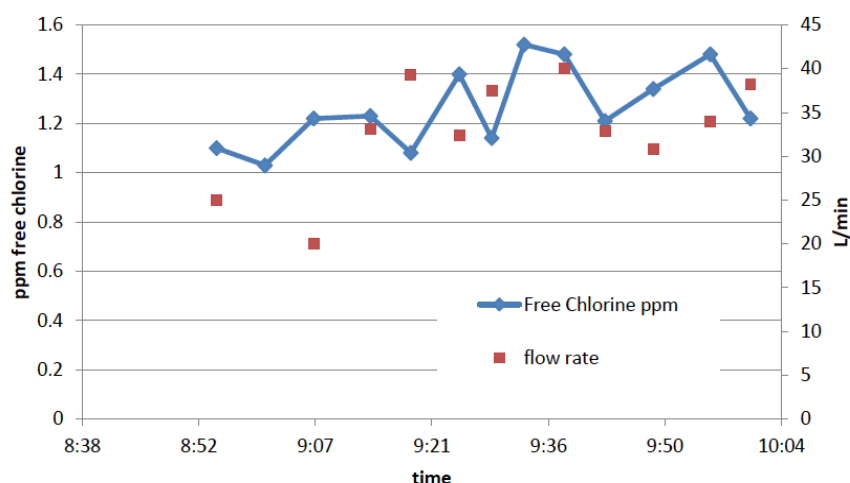


Figure 13: Test results of MSR Venturi

As of November 2017, seven of the eight available Mountain Survey Research (MSR) Venturi dosers had been installed in water kiosks in Kisumu, Kenya.

Table 3: Summary of Water Kiosks installed with MSR Venturi.

Kiosk ID	Kiosk name	Location	Installation date	Payment completion date	Sales option chosen(1)
6 (461)	Mboto Community Water Project	Rural	07/09/2017	05/03/2018	Option 1
14 (469)	Rodi Disabled Water Project	Rural	15/09/2017	15/03/2018	Option 1
16 (471)	Nyando community-based organization	Rural	25/08/2017	25/02/2018	Option 3
22 (477)(2)	Gita Water Project	Periurban	18/09/2017	18/03/2018	Option 2
29 (484)	Koluoch Water Project	Rural	31/08/2017	28/02/2018	Option 3
30 (485)	Blassovilla Water Kiosk	Urban	22/09/2017	22/03/2018	Option 2
32 (487)	Destiny Mentors Water Kiosk	Rural	08/11/2017	08/05/2018	Option 4

Abbreviation: ID, identification.

1. Option 1: Standard; Option 2: Standard + chlorine delivery; Option 3: Standard + lease-to-own; Option 4: Full package (standard + chlorine delivery + lease-to-own).

2. This kiosk created a mobile structure that allows the MSR Venturi to be placed in multiple systems.

4 HUMAN RESOURCES AND ADMINISTRATION

4.1 Human Resources:

At the beginning of the year, SWAP had workforce of 49 staff and by end of December 2017, a total of 45 staff. These staffs are spread out in 5 Counties where SWAP operates including Kisumu, Siaya, Migori, Vihiga and Kakamega. The headquarters is in Kisumu and field offices are located in Kegondi, Ekeru, Ahero and Nyatike of Vihiga, Kakamega, Kisumu and Migori Counties respectively.

4.2 Recruitment and Resignations:

SWAP allows the recruitments of its staff to be done after identifying the need for a certain post, assessing the financial situation and agreeing on the terms of payment before posting and making the position description for advertisement. During the year, new staffs that were recruited by SWAP through various interviews which had been advertised locally, shortlisting and selection were done and the candidates placed. The staff recruited included Human Resources & Administration Officer, Accounts Assistant, Sales and Marketing Officer, Assistant Project Officer, Principal Investigator, Study Coordinator, (5) Lab technicians, (3) Field Assistant) and (2) Interns in Water lab and Finance department. During the year, four (4) employees tendered their resignation.

4.3 Procurement

- Procurement of products and services from various suppliers was done and achieved most of the targets in the areas of operations.
- The customer care relationship with the suppliers was also up to the expected standards and maintained most of the contracts with them.
- Pre-qualification of suppliers for 2018/2019 financial year was successfully done.
- Assets that were not in use were successfully disposed according to SWAP policy on assets disposal.
- SWAP acquired a brand new Car for Health Communication and Marketing Program.

Throughout the year, SWAP received students from international research institutions who were attached to various Projects and stayed in SWAP's Guest house. Income Generating Activities included additional office space for MITI Health, Guest house, airtime and electricity Tokens. Further income was realized from the product sales and the water lab.

4.4 Staff Welfare

SWAP has its welfare with everyone involved in the contribution whenever there are celebrations, funerals or any called for activity in helping staffs financially as a team. On August 31st, SWAP was saddened by the loss of Sitnah Faith who was the Study Supervisor and founding member of research department. She had worked for the organization for the last 10 years.

4.5 Capacity Building

SWAP encourages its employees to pursue further education in enhancing their skills and abilities. The year had some few employees sponsored for the trainings such as Monitoring and Evaluation; communication skill; governance of NGOs; Kenya Integrated Rapid Assessment; Gender and Development; Human Resources and Development; and International Consulting.

5 FINANCE

In the year 2017, SWAP received a total amount of KES 90,364,332.46 from grants for programs and research activities as well as revenue from sales and other income generating activities.

Table 4: Donors and Well Wishers who supported SWAP Programs in 2017

SNo.	DONOR / WELL WISHERS	PROJECT
1	USAID/ PSK – Population Services Kenya	Social Behavioral Change Communication focusing on prevention of Malaria, diarrhea and HIV in Migori County
2	Harber Charitable Foundation	OVC, Widow and Emergency Support
3	Gabriele Norado	OVC and Widow Support
4	Siemens Stiftung	Monitoring and Water Testing of Skyhydrants
5	Hoog Tijd voor Andersom and Wild Geese	Chiela Women Group – Dunga Women empowerment project
6	Pascal Rubli – MPH student	Unrestricted Funds
7	Tom Henrich – Previous Procter and Gamble	Education Fund
8	Global Giving	Sondu Water Enterprise
9	Vivatos	Water tank and hand washing station at primary school
10	Procter and Gamble Ambassador – St Ignatius Church	WASH training and assessment in Molo County
11	Private Well Wishers	Education fund late Sitnah

Table 5: Donors and Research Partners who supported SWAP in 2017

SNo.	DONORS AND RESEARCH PARTNERS	PROJECTS
1	Liverpool School for Tropical Medicine	Cups or Cash for Girls Trial – Menstrual Hygiene Study in Siaya County
2	North Western University	Supplementing the Cups or Cash for Girls Trial for Small Group Sessions
3	PATH/Stanford University	Venturi Study – Chlorine Doser in Kisumu County
4	University of Illinois	Solar Powered Water Disinfection Study in Kisumu County
5	CDC – Atlanta	Defining Cut Offs for the Point of Care Circulating Cathodic Antigen assay in areas of low schistosoma mansoni prevalence in Siaya and Kisumu County
6	Bill and Melinda Gates Foundation / Stockholm Environment Institute	Afya Credit Incentive for improved Maternal and Child Health outcome in Siaya County
7	CARE US	WASH Consulting in Schools by Alex Mwaki

The guesthouse was also occupied often with students from the various research partners. SWAP charges Kes 40,000 per month or Kes 1,500 per day.

SWAP has been renting office space to Miti Health, who occupied one office and a total of Kes 15,000 monthly was collected for office space.

The lab brought in some revenue with external partners seeking its services. The lab was further utilized throughout the year by research partners and its use was included in the research budgets.

Smaller income was realized from sales of photocopies, airtime and electricity token to support payment of the office assistants who often are not catered for by donors.

Table 6: The income received in 2017

Donors	Details	KES
Pascal Rubli	Private well-wisher – unrestricted	80,000
Liverpool School of Tropical Medicine	Cups or Cash Trial for Girls Equity Bank	8,730,000
Tom Henrich	Private well-wisher – scholarship orphan	27,500
Siemens	Sondu Water Project	196,500
CDC	Schistosomiasis Study	18,699,700
Vivatos	WASH in school support	97,000
CDC	Qualitative Research	77,500
HCM PSK	Social Behavioral Change Communication focusing on prevention of Malaria, diarrhea and HIV in Migori County	11,868,885.50
Stockholm Environment Institute	ANC study	8,576,790
HCF	OVC and Emergency Support	2,205,000
HCF	Medical Support to child with sickle cell	160,000
Gabriele Norado	OVC and Widow support	325,000
North Western University	Menstrual Hygiene Study	1,827,500
University of Illinois	Solar powered water Disinfection Unit Research	1,035,000
University of Stanford	WASH study Venturi	5,253,200
Sitnah Fund	Support to Sitnah's children education	155,801
Global Giving	Sondu Water Project	32,856.40
HoogTijdvoorAndersom/ Wild Geese	Chiela Women Project	1,099,450
St Ignatius Church US	Molo Water Project	265,000
CARE	WASH Program Nairobi Consulting	1,201,400
Unrestricted funds	Funds from guest house and ,Miti Health rent	822,315
Sales from Products		27,627,934.56
Total Income		90,364,332.46

SWAP experienced financial growth in sales from Mumias sub Distributors, Kisumu Field, Ahero Jamii Center, Kegondi Jamii Center and Sondu water Kiosk. Sales were mainly from P and G products supplied by Hasbah Kenya Ltd and PSK. The year was characterized with challenges ranging from post-election chaos in Western Kenya, where most of our sales were done and competition from other suppliers of related products. See the graph below

Table 7: Summary of Product Sales in 2017

PRODUCTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Water Guard	1,985	2304	1892	607	1410	528	1215	8681	880	139	1801	584	22,026
PuR	24,028	361	960	12	25215	232	1203	72	7	0	6451	120	58,661
Aquatab	2,633	1310	2283	0	1201	318	24725	45010	109	63	52509	21	130,182
Ceramic Filter	26	17	12	6	0	6	14	3	4	5	7	3	103
Ceramaji filter only	0	1	0	0	0	2	1	1	0	1	2	0	8
Water Storage Buckets 20 L	18	1	1	0	0	0	7	2	0	0	0	0	29
Water Storage Buckets 60 L	33	8	5	0	3	4	27		1	0	80	1	162
Stands for Buckets 20l	3	0	4	0	0	1	3	1	0	0	0	0	12
Stands for Buckets 60l	20	0	1	0	0	0	6	1	0	0	440	0	468
Bucket Taps	0	4	2	0	5	3	21		0	11	0	2	48
Basin	1	11	1	0	2	1	0	1	8	4	0	0	29
Trust Condoms Regular	168	0	0	0	0	0	0	0	0	0	0	0	168
Trust Condoms Studded	0	0	0	0	96	3	48	96	10	144	48	0	445
Trust Classic	632	530	140	984	96	96	672	384	336	1608	45	0	5,523
Trust Ribbed	24	0	2	0	0	0	0	48	0	289	144	34	541
White Supanet 6*6	11	4	1	1	3	11	13	1	0	0	6	1	52
White Supanet 5*6	2	27	72	3		1	1	1	0	0	2	0	109

PRODUCTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Blue supanet 6*6	1	0	4	1		0	3	0	1	0	1	2	13
Blue supanet 5*6	0	21	7	0		0	4	0	0	0	1	0	33
Always Ultra-Thin	941	852	458	393	591	532	1056	566	667	246	277	388	6,967
Always Ultra Unscented	0	0	390	0	166	0	842	1	0	16	361	0	1,776
Always Maxi Thick Long	719	609	255	119	130	238	0	297	553	384	246	218	3,768
Pampers LC Maxi	627	487	494	141	510	242	488	500	491	149	171	140	4,440
Pampers LC Midi	188	175	77	62	187	63	408	270	158	112	342	55	2,097
Pampers LC Mini	116	122	126	19	75	26	406	144	129	94	16	51	1,324
Jumbo Maxi	14	14	41	5	24	16	29	10	22	13	3	25	216
Jumbo Midi	3	7	11	0	5	9	4	8	19	3	1	0	70
Jumbo Mini	0	0	3	0	12	11	2	1	2	2	0	0	33
Pampers Midi High Count	1	0	0	0	9	0	0	0	5	0	0	0	15
Pampers Maxi High Count	0	0	1	0	7	0	2	0	14	0	0	0	24
Pampers Junior Unisex LC	25	78	10	82	45	8	57	0	61	31	95	0	492
Installable Cook Stoves	3	0	3	1	0	1	5	1	2	2	2	0	20
Portable Cook Stoves	2	4	20	0	1	0	1	0	0	1	0	0	29
Fortified Flour Extra	501	24	0	14	11	33	14	14	27	20	12	21	691

PRODUCTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Moringa 25 gms	15	14	10	0	1	0	2	3	3	1	5		54
Moringa 50 gms	93	5	7	8	15	38	17	13	5	2	7		210
Ariel 45 gms	7,794	14720	9878	6549	7945	6628	5022	5785	11973	4864	3237	5915	90,310
Ariel 100 gms	655	978	241	289	162	755	159	404	93	758	338	44	4,876
Ariel 200 gms	496	272	177	68	207	223	189	144	151	171	147	0	2,245
Ariel 500 gms	429	358	271	217	125	310	131	186	262	136	24	120	2,569
Ariel 1 kg	120	58	20	2	11	41	3	7	25	12	12	52	363
Lido Bar Soap	692	1269	916	780	1117	999	334	1236	1272	1091	125	921	10,752
Camay pure fresh	9	12	6	0	21	5	0	0	0	0	0	0	53
Camay Romantic	14	0	0	0	0	0	0	0	0	0	0	0	14
Ushindi Medicated	134	91	223	25	24	80	788	5	4	15	17	16	1,422
Tissue Paper	1,571	908	1269	604	1091	1437	951	288	823	994	1314	166	11,416
F2 Savlon	11	3	12	0	11	15	6	5	3	0	3	5	74
F3 Savlon	26	3	1	24	7	0	12	1	12	2	9	5	102
Benzylkonium	7	6	4	2	2	0	66	0	1	6	3	6	103
Menthoplus	2	0	0	1	0	0	1	1	1	0	1		7
Albendazole	14	1	8	9	7	1	6	1	3	32	2	8	92
Ecozoom stove	0	1	0	0	0	1	0	0	0	0	0	0	2
Solar Lamp S 20	16	4	5	0	2	0	1	0	0	1	0	0	29
Solar Lamp S 2	8	3	4	2	3	3	7	2	7	39	5	0	83
Solar Lamp	6	0	19	2	1	0	0	0		4	0	1	33

PRODUCTS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
AI													
Kinga Soap			70	21	29	28	19	0	8	1	24	2	202
Downey Valley			23	252	447	128	311	7	570	522	0	406	2,666
Volt Light							10	0	1	0	0	0	11

Annex 1: Published Papers from Research Findings and Evidence of Impact

- 1) Center for Disease Control and Prevention – Atlanta, Department of Health and Human Services: Baseline Data from the Nyando Integrated Child Health and Education Project. MMWR – CDC Weekly report – Vol 56 October 22, 2007
- 2) Matthew C Freeman et al- 07-03-2009: Increasing equity of access to point of use water treatment products through social marketing and entrepreneurship: a case study in Western Kenya. Journal of Water and Health
- 3) Julie R Harris et al: Effect of point of use water treatment and safe water storage interventions on diarrhea in infants of HIV infected mothers. , 15 October 2009_Journal of Infectious Diseases
- 4) Maria Elena D. Jefferds et al: Formative research exploring acceptability, utilization and promotion in order to develop an micronutrient powder (Sprinkles) intervention among Luo families in Western Kenya. Food and Nutrition Bulletin vol 31 (supplement) 2010 – the United Nations University, 2010.
- 5) Parmi Suchdev et al: Monitoring the marketing, distribution and use of Sprinkles micronutrient powders in rural Western Kenya . Food and Nutrition Bulletin vol 31, no 2 (supplement) 2010 – the United Nations University, 2010
- 6) Parmi Suchdev et al: Sustainability of market based community distribution of sprinkles in Western Kenya. Maternal and Child Nutrition 2012.
- 7) Samuel Loewenberg : Fighting Child Nutrition in Africa through the use of micronutrient supplements. Health Affairs, June 2011
- 8) Julie R Harris et al: Addressing inequities in access to health products through the use of social marketing, community mobilization and local entrepreneurship in Rural Western Kenya. International Journal of Population Research Article ID 470598, 25th March 2012
- 9) Frederick E Grant et al: Comparison of indicators of iron deficiency in Kenyan children. American Journal of Clinical Nutrition – 2012 American Society of Nutrition, 2012
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- 11) Elizaeth Briere et al : Impact of integration of Hygiene kit distribution with routine immunizations on infant vaccine coverage and water treatment and hand washing practices of Kenyan mothers.
The Journal of Infectious Diseases 2012:205 (supplement 1), 2012
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- 16) Katharine Shilling et al: Challenge of promoting interventions to prevent disease in impoverished populations in rural western Kenya – American Journal of Public Health – December 2013
- 17) Eric M Foote et al: Determinants of anemia among preschool children in rural, western Kenya; under review.
- 18) Foote et Al; Impact of Locally Produced ceramic cook stoves on respiratory disease in children in Rural Western Kenya The American Society of Tropical Medicine and Hygiene – October 4, 2012.
- 19) Alexander K. et al: Water, Sanitation and Hygiene Conditions in Kenyan Rural Schools: Are schools meeting the needs of Menstruating girls: Journal Water – April 9, 2014
- 20) Bobbie Person et al: It is good for my family's health and cooks food in a way that my heart loves; qualitative findings and implications. *Int. J. Environ. Res. Public Health* 2012,
- 21) Graves et all: Teacher perspectives on implementing and sustaining a handwashing promotion intervention in Western Kenyan primary schools. *Int Q Community Health Educ*, 2014; Vol. 34(2) 159-170 (doi: <http://dx.doi.org/10.2190/IQ.34.2.d>).
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