Safe Water and AIDS Project (SWAP)

Behind Royal City Hotel, Off Aga Khan Road, Milimani Estate
P.O. Box 3323, 40100 Kisumu, Kenya, Tel +254(0)202030712
Email: info@swapkenya.org
Website: http://www.swapkenya.org
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM</td>
<td>Annual General Meeting</td>
</tr>
<tr>
<td>ANC</td>
<td>Ante Natal Care</td>
</tr>
<tr>
<td>CBO</td>
<td>Community Based Organization</td>
</tr>
<tr>
<td>CCG</td>
<td>Cups and Cash for Girls</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CHA</td>
<td>Community Health Assistant</td>
</tr>
<tr>
<td>CHV</td>
<td>Community Health Volunteer</td>
</tr>
<tr>
<td>CME</td>
<td>Continuous Medical Education</td>
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<tr>
<td>CRS</td>
<td>Catholic Relief Service</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil Society Organization</td>
</tr>
<tr>
<td>ECD</td>
<td>Early Childhood Development</td>
</tr>
<tr>
<td>ETL</td>
<td>Education Through Listening</td>
</tr>
<tr>
<td>HCM</td>
<td>Health Communication and Marketing</td>
</tr>
<tr>
<td>HENNET</td>
<td>Health NGO Network</td>
</tr>
<tr>
<td>ICC</td>
<td>Interagency Coordinating Committees</td>
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<tr>
<td>IEC</td>
<td>Information Education and Communication</td>
</tr>
<tr>
<td>IPC</td>
<td>Inter Personal Communication</td>
</tr>
<tr>
<td>KENAS</td>
<td>Kenya Accreditation Service</td>
</tr>
<tr>
<td>KES</td>
<td>Kenya Shilling</td>
</tr>
<tr>
<td>KEMRI</td>
<td>Kenya Medical Research Institute</td>
</tr>
<tr>
<td>KHF</td>
<td>Kenya Healthcare Federation</td>
</tr>
<tr>
<td>KIWASH</td>
<td>Kenya Integrated Water Sanitation and Hygiene</td>
</tr>
<tr>
<td>KWAO</td>
<td>Kenya Water for Health Organization</td>
</tr>
<tr>
<td>LCC</td>
<td>Life Cycle Cost</td>
</tr>
<tr>
<td>LLITN</td>
<td>Long Lasting Insecticide Treated Net</td>
</tr>
<tr>
<td>MCH</td>
<td>Maternal Child Health</td>
</tr>
<tr>
<td>MDA</td>
<td>Mass Drug Administration</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
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<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MUAC</td>
<td>Mid-Upper Arm Circumference</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>NSBDP</td>
<td>National School Based Deworming Programme</td>
</tr>
<tr>
<td>NTD</td>
<td>Neglected Tropical Diseases</td>
</tr>
<tr>
<td>PHO</td>
<td>Public Health Officer</td>
</tr>
<tr>
<td>POC-CCA</td>
<td>Point of Care Circulating Cathodic Antigen</td>
</tr>
<tr>
<td>POU</td>
<td>Point of Use</td>
</tr>
<tr>
<td>RAND</td>
<td>Research and Development</td>
</tr>
<tr>
<td>SWAP</td>
<td>Safe Water &amp; AIDS Project</td>
</tr>
</tbody>
</table>
SBCC  Social Behavior Change Communication
SGC  Small Group Communication
SWASH+  School Water Sanitation and Hygiene plus Community Impact
SWE  Safe Water Enterprise
USAID  United States Agency for International Development
UHC  Universal Health Coverage
UNICEF  United Nations Children’s Fund
WRA  Water Resources Authority
WHO  World Health Organization
FROM THE COUNTRY DIRECTOR’S DESK

The year 2018 was an exciting year to SWAP fraternity. It is my pleasure to share our annual report on the tremendous achievements realized, experiences, best practices, collaboration and expansion of our scope. Numerous lessons were learnt and challenges were at the same time encountered. I wish to appreciate the overwhelming support from the Board of Directors who ensured compliance towards governance of the organization. The entire staffs were committed and dedicated to their work in order to oblige to contractual obligation made with our funding partners and stakeholders at large. The collaborators and our delivery agents played a significant role to ensure that vulnerable population enjoyed high quality of life by intervening with innovative solutions for improved health and economic status.

SWAP hosted a number of both local and international partners and research institutions including networking forum, Universities, Foundations, Corporation, Private Company, County Government, Media and Banking service providers. In addition, The Taskforce on Global Health-Neglected Tropical Diseases support Centre.

SWAP entered into new contract agreements with Research and Development Corporation; Centers for Disease Control and Prevention Foundation; Kenya National Accreditation Service and Washington State University. Signing of these agreements enabled SWAP to widen its scope in field of Early Childhood Developments, nutritional assessments, microbiological water quality testing and qualitative research such as In-depth Interviews and Focus Group Discussion. Other area of exploration was on Voluntary Medical Male Circumcision with Pacific Institute for Research and Evaluation. Maseno University Ethics Review Committee and the National Commission for Science Technology and Innovation approved our research protocols and awarded permit to carry out these studies respectively.

I take this opportunity to recognize our exiting partners who have continued to work with us in various public health program, research, orphaned and vulnerable children support and emergency response interventions. They included Population Services Kenya, Liverpool School of Tropical Medicine, Stockholm Environment Institute, Centers for Disease Control and Prevention, Stanford University, CARE International, University of Illinois, Siemens Stiftung, Harber Charitable Foundation and Private donors.

The Board of Directors engaged Shadrack and Co as the external Auditor to conduct the previous year audit for SWAP. The report was shared with our funding partners and submitted to the Non- Governmental Organization Coordinating body.

I hope you will enjoy reading the report and provide us with your feedback.

Thank you all and I wish you a secure and prosperous 2019.

Alex Mwaki

Country Director
FROM THE TECHNICAL ADVISOR’S DESK

2018, the 13th year of operations has been yet another year full of activities, new partnerships and achievements. Following last year’s transition from Country Director to part time Technical Advisor, I continued to offer technical support to the various projects and was co-investigator in most of the studies. This year my level of effort was 50% for SWAP, while I ventured into other consulting opportunities. I remained active member of the Board of Directors and SWAP’s Management Team.

SWAP was elected as National Chair of HENNET during last year’s AGM. This has made me travel frequent to Nairobi for high level meetings with the Ministry of Health, Private Sector and the Health NGO’s. HENNET plays a major role in the implementation of Universal Health Coverage with advocacy, service delivery and social accountability.

Sadly we lost this year yet another employee, Wilson Otieno, SWAP’s loyal driver due to short illness. We have done fund raising for the family to keep supporting them during this trying time in addition to the other families who need our support. We were also blessed with a wedding of one of our employees, Seline Koske, who got married on the 9th of December 2018.

I am very proud of our committed employees who have been determined to ensuring that donor funded activities continue as per agreements and who showed their passion for the vulnerable communities they serve. The area of operations is still leading in communicable diseases and through the interventions we have made positive health impact and improved quality of life.

A big thank you as well to our board members and management team members, who have been supportive and a source of inspiration.

Best wishes for 2019.

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**


Twitter: @swapkenya

Website: [http://www.swapkenya.org/](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
- CDC Foundation
- KEMRI
- SWAP Board of Directors and Management Team
- Population Services Kenya
- UKAID/DFID
- Bill and Melinda Gates Foundation
- Procter & Gamble Children Safe Drinking Water Program
- CARE International
- PATH
- Stockholm Environment Institute
- Liverpool School of Tropical Medicine
- Stanford University
- University of Illinois at Chicago
- Maseno University
- Duke University
- Shadrack and Company
- Siemens Stiftung
- Global Giving
- Hoog tijd voor Andersom
- Harber Charitable Foundation
- Gabriele Norado
- Innovations in Health Care
- HENNET
- KEWASNET
- KIWASH
- KWAHO
- Western Kenya Humanitarian Hub

2018 IN A NUTSHELL

Programs
1) Health Communication and Marketing: a PSK sub award and USAID funded focused on malaria, case management and diarrhoea prevention on-going in Migori County.
2) Sondu Water Enterprise with partnerships with Siemens Stiftung and Sky juice Foundation in preparation to hand over to the community.
3) Chiela Women Group – Fish cage project and harvested fish (5 times) and tour motorized boat generating income and received additional training on women empowerment.
4) Orphaned and Vulnerable Children and Emergency Support: a Scholarship for OVCs, business support for a widow, medical support and emergency response during disease outbreaks and flood.
5) Siemens Stiftung: a monitoring and water quality testing of 5 Skyhydrant units in western Kenya.
Major On-going Research Projects
6) ECD study with RAND Corporation – completed pilot, census and baseline in Rachuonyo East, Rachuonyo South and Sabatia Sub Counties. 6 Mentors and 45 trained CHVs on ECD curriculum and delivering the parenting sessions.
7) CDC: POC CCA schistosomiasis mansoni study in western Kenya looking at prevalence of bilharzia and soil transmitted helminthe.
8) Afya Credit Incentives Study: a Sub award with Stockholm Environment Institute and funded by Bill and Melinda Gates Foundation and on-going targeting pregnant mothers in Siaya County
9) Cups or Cash for Girls Trial: a study in collaboration with Liverpool School of Tropical Medicine and KEMRI in Siaya County targeting girls in day secondary school
10) CARE Consulting – A SWASH+ project implemented by Alex Mwaki focusing on procuring private sector service delivery and life cycle costing of WASH in schools

Completed Research
11) MSR Venturi Chlorine Dozer Study with PATH- MSR Global Health and Stanford University – Finalized study which was a business model for water kiosks.

New Research in 2018
12) A nutritional Study implemented by Kisumu County Health Services and funded by CDC Foundation.
13) CDC Qualitative WASH research in Kibera: a FGDs and In depth Interviews completed and final reports submitted.
15) Evaluation of water treatment practices and WASH coverage of clinics and schools by World Vision: collaboration with CDC and P&G

Laboratory Services
16) Water Lab – The bacteriological and chemical water testing is mostly used for research purposes. SWAP is undergoing the process of accreditation. An assessment team from KENAS conducted 2 days initial assessment.
17) Diagnostic lab – testing stool and urine samples for the Schistosomiasis Mansoni Study.

HR/Admin
• 45 employees and male: female ratio of 1:1
• 3 International research students supported SWAP
• Strategic Planning 2018-2019 done and report shared
• New HR/Admin Officer internally promoted.
Finance
- 17 different donors supported SWAP in 2018
- Total income from grants was KES 85,395,828
- Income generated from product sales, guesthouse, rent, airtime, electricity token, water sales photocopying services and water lab.

HENNET – THE HEALTH NGO NETWORK
SWAP became members of HENNET in 2009 and served 7 years in the board of directors. SWAP was elected as National Chair during the AGM of 2018. HENNET was founded in 2005 and hosted at AMREF Health Africa’s Kenya Country Office. The purpose is to give civil society a united voice in serving and shaping the health sector, while stimulating linkages with the Ministry of Health and Private Sector with a common vision of a Healthy Kenyan Society. In 2018 there was transition in HENNET with the resignation of the previous National Coordinator and a new incoming National Coordinator.

Figure 1: National Chair of HENNET seated left and Coordinator

HENNET is now an important voice for civil society in the Universal Health Care process, committed to provide advisory, advocacy and service delivery support. HENNET has a network of 105 Civil Society Organizations focusing on health in all 47 counties. HENNET hosts several ICC meetings, technical working groups and forums for advocacy and networking. HENNET is member of the Kenya Healthcare Federation.

The Technical Advisor has taken the leadership as HENNET chair and attends high level forums, board meetings, AGM, CEO’s breakfast and Members meeting in Nairobi. In March 2018, HENNET represented the civil society during the Kenya Health Forum.
The forum’s main focus was Universal Health Coverage (UHC). HENNET signed a communique on behalf of CSOs with strategies to ensure acceleration towards Universal Health Coverage. HENNET prepared and shared a position paper on UHC and participated in the UHC service delivery and UHC health benefits panels. HENNET is establishing a social accountability alliance with AMREF Health Africa focused on UHC. The below photo shows the presentation of the Communique together with the Ministry of Health, County Health Management Teams, Council Of Governors, Development Partners in Health and the Private Sector.

![Figure 2: HENNET presentation of communique with stakeholders](image)

1 PROGRAMS

1.1 HEALTH COMMUNICATION AND MARKETING – (HCM)

HCM is a five years project implemented in Migori County with main focus on malaria prevention with key messages on net use, malaria in pregnancy and malaria case management with full funding and support from USAID through PS Kenya. SWAP also integrates diarrhea prevention with key messages on safe water systems; water treatment, safe storage and behavior change.

The program aims to improve adoption and maintenance of healthy behaviors related to malaria, diarrhea, malaria case management and increase net use amongst pregnant women and children. The following activities were planned;

- Training CHVs and implementation through a phased approach every 3 months
- Joint support supervision with MOH
- Education Through Listening (ETL) technique
SWAP achieved the following:

- Successful entry in Uriri Sub County
- Trained 250 CHVs and 20 CHAs and PHOs
- Reached 26,490 households out the targeted 25,105 (105.52%) with malaria IPC.
- The intervention enhanced LLITNS use in the household; most households now know how to hang nets for their use.
- The award of certificates and IEC materials motivated the CHVs.
- The community challenge created a great impact on the men taking part in the making of the project successful. There is the male involvement in the ANC visits and net hangings demonstrations’.

**Figure 3: Supportive supervision by MOH staffs**

- The MOH team played a great role in the success of the project through their support on reports and innovating new ways of going about the whole project.
- The availability of IEC materials and road shows made it possible for the visibility of the project in the communities.

Examples of best practices were as follows;

- Joint planning with MOH staffs and the CHVs
- Payment of stipend motivated CHVs to perform well.
- Support supervision and CMEs enhanced the performance of healthcare workers
- Weekly meetings with the CHVs improved the data quality and the reports

Challenges were faced during the implementation and included;

- The short duration of the implementation of the project in a Sub County, makes it difficult to measure the impact of the project fully.
- Bedbug related myths still hinder some household to use LLITN and this makes it difficult to achieve the 100% net usage.
1.2 ORPHANS AND VULNERABLE CHILDREN AND WIDOW SUPPORT
This program supports orphans and responds to emergencies during epidemics and floods. Support is given to orphans attached to the program and one time support to needy cases.

Community and orphan support aims at making them self-reliant. The following activities were carried out;
- Paying school fees to orphans and supporting the needy.
- Responding to emergencies,
- Provide psychosocial support, Community support, Funeral support and medical support to identified needy cases.
- Continuous follow-ups to assess progress.

Table 1: Orphaned and Vulnerable Children and Emergency Cases Supported

<table>
<thead>
<tr>
<th>No</th>
<th>Type of support</th>
<th>No supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Orphans supported</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>Widows/widowers</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Medical support</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Funeral support</td>
<td>11</td>
</tr>
<tr>
<td>5</td>
<td>Community support</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Cholera response</td>
<td>3</td>
</tr>
</tbody>
</table>

Some challenges were encountered and included:
- SWAP has always received so many requests for support but the funding level is low.
- Monitoring students who are far away from Kisumu County is another challenge.

Moving forward, SWAP will continue with the students on full scholarship program and support during emergency response.

1.3 MUMIAS SUB DISTRIBUTORS
SWAP established a Sub Distributor centre of P&G products in Ekero market in Mumias that was closed down in April 2018. This was due to contract challenges with the supplier who encroached the territories by selling to our customers hence a drop in sales which led to unsustainability of the centre.

The low revenue and fixed costs meant that the sub D’s growing concern was not realistic hence the decision to terminate the contract and close. The Sub D had 3 full time employees and their contracts were terminated.
1.4 **SONDU WATER ENTERPRISE**

In 2015, SWAP signed an agreement with Siemens Stiftung and Sky juice to establish a second Safe Water Enterprise in Sondu, Kisumu County, along the river Sondu Miriu. This is an area with poor health indicators. Sondu Water Enterprise using the Sky hydrant technology has improved the quality of life of the vulnerable communities. SWAP has occasionally received technical support from Siemens Stiftung particularly to build the capacity of kiosk management members and also to market the kiosk. In 2018, SWAP entered into an agreement with Siemens Stiftung to conduct water tests and the technical monitoring of Safe Water Enterprises (SWE) sites in Kisumu, Nandi and Homa Bay Counties. In addition, the agreement included regular water tests and technical monitoring as well as capacity building on the job training to Ben Otieno who is the Water Operator from Korumba water project.

The main objective was to ensure the local communities around Sondu get access to clean safe water and improve the general hygiene of the Sondu community.

Community health volunteers training was conducted by KWAHO and technical support from Siemens who have been constantly supporting water kiosks. A new piping from the main source was successful done and a new water pump was brought. Capacity building of the water committee was conducted by KIWASH and Ministry of Health.

We managed to install electricity at the site with support from the Siemens foundation including an electric water pump. KIWASH, a USAID funded program supported the site through quarterly management training. Water Resource Authority is also members of the Kiosk. The Kiosk management committee has registered the kiosk as CBO.

In the beginning of the year we had pumping problem, fuel generator had broken down and funding to support most of activities declined. The main water pipes had leakages and damage of sky hydrant unit. The kiosk will still be supervised and monitored by SWAP with collaboration with from local community.

1.5 **CHIELA WOMEN GROUP PROJECT**

Chiela Women Group is based at Dunga Beach with a total of 17 women who came together in a cooperative. The main objective of the group is to improve their standard of living to be able to support their families through their fish trade. The group buys fish from the fishermen which they fry sundry or just clean and sell in order to earn their livelihood. Within Chiela, the women run their own cooperative where everyone contributes a certain amount from the sale of the fish to the group.
Key activities of the group include;

- The group’s main activity is selling fish
- Involve in boat riding (they have a boat that also form part of their activity)
- Entertainment in functions
- Offer catering services.

SWAP did capacity building and trained Chiela Women group on the following topics:

- Business Skills and record keeping
- HIV/AIDS / Safe Water/ Malaria
- Behavioral Change Communication
- Eco tourism
- Group dynamics

A tour boat and fish cage was procured with funding from Wild Geese and Hoog Tijd voor Andersom.

In addition Chiela women received training from a professional trainer from the Netherlands for 3 days training and coaching on women empowerment. They also harvested their fish from the Cage.

Some of the best practices include;

i. The group has a bank account and does weekly saving in the Bank which done rotationally among the members.
ii. They meet every Monday to discuss the progress and contribute
iii. Delegation of responsibilities amongst themselves (those in charge of the boat and the fish cage).

Some of the challenges encountered included;

- One of their member died of breast cancer living the group now with 16 members
- Two of the women group members lost their Husbands
- Low fish harvesting compared to expectation.
The women group has planned the following;

- Procuring another new tour boat using the income received from first boat
- Re-stock their Fish Cage once the Water Hyacinth (a seasonal Monocotyledon weed that affects the Lake)
- Start using Biogas fuel done by a partner for the Fish mongers in the area.

1.6 CARE CONSULTING

Safe Water and AID Project partnered with CARE international to provide consultancy in the School Water, Sanitation and Hygiene plus Community Impact program (SWASH+). The Country Director is directly involved in the program. CARE Kenya implemented the SWASH+ phase II Project whose aim was to improve the sustainability of school water, sanitation and hygiene (WASH) in order to effectively implement the Kenyan National School Health Policy. The project utilized evidence and learning from research to target key decision-makers at Ministry of Education (MOE) and Ministry of Health (MOH). This continuation phase between 2016 and 2019 is aimed at Stakeholders acting on available evidence through instituting policies to improve affordability and choice for sanitation in (urban) schools. 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 following activities were achieved during the reporting period;

- Trained enumerator on Life Cycle Cost (LCC study tool on 18th and 19th January 2018
- Kisumu County Director of Education and Kisumu Central Sub County Director of Education provided approval letters for the LCC study in 25 urban schools.
- Meeting with Kisumu County Director of Education and Kisumu Central Sub County Director of Education on 22nd January 2018
- Ministry of Education issued introductory letter for SWASH+ activities in 4 urban counties including Nakuru, Nairobi, Kisumu and Mombasa.
- Nakuru, Mombasa and Nairobi County Directors of Education issued approval letters to conduct SWASH+ activities in their respective Counties.
- Conducted 5 Key in-depth interviews with School WASH partners in Kisumu Urban areas including UNICEF, KUAP, SANA, County Water Department and KYFA for the Life Cycle Cost Study.
- Attended the 41st Water Engineering Development Centre (WEDC) International Conference held at Egerton University, Njoro between 9th and 11th July 2018. The theme was transformation towards resilient and sustainable WASH service.
- Attended the 7th Annual Measurement Evidence and Dissemination for Scale Convening between 23rd and 28th September 2018 in Dakar, Senegal organized by Bill and Melinda Gates Foundation.
• On 21st September 2018, hosted Board of Management meeting at Royal City Hotel drawn from 8 schools in Kisumu Central Sub County to get feedback on procuring and financing sanitation service delivery courtesy of Sub County Director of Education for Kisumu Central.

• Attended School WASH partners meeting at Silver Spring Hotel on 10th September 2018. This was to get feedback from partners and stakeholders on the development of guidelines for procuring the private sector sanitation delivery service.

• On 19th October 2018, held joint meeting with Sanergy for Boards of Management in Mombasa County. 6 out of 8 schools were represented in the meeting to discuss feedback on the development of Guidelines for private sector sanitation delivery in Kenyan schools courtesy of County Director of Education for Mombasa.

1.7 MONITORING AND WATER TESTING OF 5 SKYHYDRANT UNITS

In the year 2018, SWAP and SIEMENS renewed agreement to continue with regular water tests and technical monitoring as well as capacity building and on the job training of Ben Otieno, Water Operator from Korumba water kiosk.

The four sites were Soko Kogweno and Korumba in Kisumu County; Nyangoro Health Centre in Homa Bay County and Tawasco - Tinderet in Nandi County. Quarterly Bacteriological Water Testing was done and full chemical tests after 12 months. The results of the water tests were printed as water test certificates and attached on the respective SWE kiosk walls.

The objective was to monitor the sky hydrants functionality and quality of water and Advice the Siemens Stiftung technical team on the problem.

Monitoring was done successful for five sites as per the agreement. SWAP will continue with site monitoring.

Figure 7: Lab Manager (right) demonstrating water sample collection
2 NETWORKS AND PARTNERSHIPS

2.1 Memberships
SWAP continued to be active member of the following networks;

i. Innovations in Healthcare
ii. Health NGO Network as the national chair
iii. WHO international network of household water treatment and safe storage
iv. Kenya Water and Sanitation Civil Society Organization Network
v. National Environmental Sanitation and Hygiene Inter Agency Coordinating Committee
vi. National Community Health Strategy Inter Agency Coordinating Committee
vii. Counties Health Stakeholders Forum
viii. Counties WASH Network Forum
ix. Western Kenya Humanitarian Hub forum

2.2 Visiting organizations and donors in 2018
- Harber Charitable Foundation
- Hoog Tijd voor Andersom
- RAND Corporation
- CDC Atlanta
- CDC Foundation
- University of Illinois at Chicago
- Liverpool School of Tropical Medicine
- Northwestern University
- Emory University
- Tufts University
- Population Services Kenya
- Stockholm Environment Institute
- Procter & Gamble
- Shadrack and Company
- Siemens Stiftung
- KIWASH
- PATH
- Sort Consulting
- National Geographic
- KENAS

2.3 Major meetings and forums attended
- Innovations in Health Care Annual Meeting in Washington DC, US
- 7th Annual Measurement Evidence Dissemination for Scale WASH meeting by Bill and Melinda Gates Foundation in Dakar, Senegal
- 41st Water, Engineering and Development Centre (WEDC) international conference in Nakuru
• Health Scientific Conference in Siaya
• Kisumu County Health Conference
• 12th Annual Neglected Tropical Diseases Conference in Nairobi
• HENNET Social Analysis Workshop in Nairobi
• HENNET Board meetings and AGM in Nairobi
• HENNET CEO’s breakfast and Members Meeting in Nairobi
• Kenya Health Care Federation AGM and Meetings in Nairobi and Kisumu
• Sankalp Summit in Nairobi
• Kenya Health Forum in Nairobi
• PATH networking cocktail meeting to introduce new CEO in Nairobi
• CRS Close out Meeting on Immunization in Nairobi
• Universal Health Coverage and Human Rights Day in Nairobi
• Annual HCM partners Meeting in Nairobi
• Universal Health Coverage Meetings in Nairobi and Kisumu
• Health Sector Round up 2018 Meeting by KHF in Nairobi
• ICC MOH Meeting on Immunization in Nairobi
• SWAP Monthly Staff and Management Meetings
• SWAP Quarterly Board of Directors meeting and AGM
• Kisumu Health Stakeholders Forum
• Kisumu County Health Promotion Advisory Committee Meeting
• Western Kenya Humanitarian Hub Meetings
• ECD technical working group Homa Bay
• Social Behavioural Change and Communication Meeting in Kisumu
• County Health Management Meetings Kisumu, Siaya, Vihiga and Homa Bay
• Meeting with Presidential Malaria Initiative, USAID and PSK in Migori
• WASH dissemination meeting Kisumu
• Training on CDC Rules and Regulations in Kisumu
• Global Handwashing Day, Menstrual Hygiene Day and World Toilet Day

3 RESEARCH

3.1 CUPS AND CASH FOR GIRLS TRIAL (CCG)

2018 was our third year of implementation for the CCG study covering 5 Sub- Counties in Siaya County. We are working with 96 schools targeting 4000 girls through the provision of cash and Moon cups intervention for menstrual hygiene management. The main objective is to help keep girls in school till they complete high school.

The following activities were carried out during the reporting period;

• WASH surveys in schools
Randomization of schools with Principals in Rarieda Sub county
Parents and teachers’ small group working sessions
Mop-ups training
Distribution of soap to schools and girls
Provision of care and treatment for HIV/HSV-2 to girls by health care workers
Initial training and provision of intervention to girls in Rarieda Sub County.

The following were our achievements;
Initial training and intervention done in all 12 new schools in Rarieda.
WASH survey and soap distribution (Ariel powder for schools & bar soap for girls) for year 2 done in all previous 84 schools.
Initial WASH survey and soap distribution (Ariel powder for schools & bar soap for girls) done in 12 new schools in Rarieda.
A total of 10 Small working group sessions carried out (3 –parents, 3-girls & 4 -teachers).
Number of trained girls who received intervention reached was 3,976 in 2018.

We learnt that complete enrolment of girls in schools reduced the number of visits by the implementation team. The focal teachers were provided with the training materials so that they could familiarize with the same.

During the implementation, we came across the following challenges;
Directives from the Ministry of Education not to interfere with the school program in the last term during writing of national examinations.
Potential difficulty to get access to teachers for small group session during the last term.
Fatigue with the schools due to the several mop up visits especially in Ugenya and Ugunja Sub Counties.
Some girls were absent or sent home for school fees during mop ups.
Other girls dropped out due to pregnancy, transfer or other reasons. Teenage pregnancy is becoming a very big concern to stakeholders and county governments in western region.
Some girls fail to access cash or experienced delays.
Girls still not utilizing the focal teachers as point of contact.
Loss and damage of cash cards and moon cups by girls.
Some girls lacked documentation to qualify to get an Equity Bank card.
Insufficient time to allow us proceed with small group sessions due to August holidays and short third term.
Delayed implementation in Rarieda affected soap distribution and WASH surveys for year two.
The implementing team from SWAP has become leaner against competing tasks.

SWAP plans to;
Finish mop-ups for girls who have not received interventions
• Conduct third WASH surveys and soap distribution for all the 96 schools
• Hold a two day workshop in January 2019 to discuss lessons learnt and emerging issues from the small group working sessions.
• Explore possibilities to use lessons learnt to make changes in the training curriculum for girls.

3.2 **AFYA CREDIT INCENTIVE FOR IMPROVED MCH OUTCOMES**

This is a partnership consortium with Stockholm Environment Institute, Nailab and SWAP. The main objective is to evaluate the role of conditional cash transfer in retaining rural women in the continuum of care during pregnancy, birth and post natal period. The study enrolled 5,488 mothers by end of July 2018 across 48 health facilities in Siaya County. There are two arms of the study;

- Intervention arm get KES 450 for transport (2,532 mothers) and control arm get KES 50 airtime (2,956 mothers)
- Each time an enrolled mother attends clinic, she is given KES 450 as incentive to meet her transport cost. Ultimately she is supposed to make 4 ANC visit, deliver at the health facility and post natal care (up to six visits).

3.3 **SCHISTOSOMIASIS STUDY**

This is a collaborative initiate with Kenya Medical Research Institute (KEMRI), Centers for Disease Control and Prevention (CDC), Ministry of Health (MOH) and Ministry of Education (MOE) and implemented by Safe Water and AIDS Project (SWAP). The study targets school age children between 9 and 12 years old in areas low schistosomiasis prevalence in western Kenya currently operating in Siaya County. The research titles are:

1. Defining cut-offs for the Point-of-Care Circulating Cathodic Antigen (POC-CCA) assay in areas of low Schistosoma mansoni prevalence in western Kenya.

2. Evaluation of the Point-of-Care Circulating Cathodic Antigen (POC-CCA) assay for mapping and monitoring mass drug administration (MDA) for Schistosoma mansoni control program in western Kenya.

The main objective of the study is to evaluate a new diagnostic technique for bilharzia, the point-of-care circulating cathodic antigen assay (POC CCA) test as an alternative to the currently used Kato-Katz and to evaluate the diagnostic performance of both assays in mapping, monitoring and evaluation of a control program for Schistosoma mansoni in western Kenya.
Activities included collection of urine and stool samples from school age children for testing and analysis after Mass Drug Administration done by the Ministry of Education through Ministry of Health at County and Sub County levels. Prior to this awareness meeting was done to sensitize the communities involved.

45 primary schools in Rarieda and Bondo Sub Counties were enrolled with an average of 90 children per school. Stool and urine samples were collected, microscopy of prevalence’s and electronic data entry done successfully. Treatment of positive cases was done by MOH (NSBDP). Preliminary results were disseminated at the 12th annual NTD conference in Nairobi through two posters and one oral presentation.

Ministry of Health and Education officers provided good support and activities accomplished within stipulated timeframe. There were a few challenges experienced during data collection, bad terrains and harsh weather but these were resolved on site and or with consultations.

All data awaits analysis with support of CDC. Year 3 proposed activities were approved.

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 received accreditation from all relevant authorities. In March 2016, SWAP received financial support from Procter & Gamble 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 accreditation service (KENAS). The tasks were to; procure lab equipments, 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.

The laboratory electrical has been boosted up by new power line from Kenya Power Company this will enable 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

SWAP’s water lab offer services using modern HACH equipments to analyze real time analysis in water to her clients at cost Kenya Shillings7,000 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 sites were in Kisumu, Nandi and Homabay Counties.
- CARE- Kenya project in Migori and Siaya Counties
- Vihiga water springs and Nyakach sites
- Laboratory as been used by University of Illinois students (UIC) -Study to Evaluation of solar-powered drinking water treatment in Kisumu County, Kenya.

![Figure 10: Water quality laboratory at SWAP office](image)

- Study to Evaluating automated chlorination in urban Kenya (Venturi study)
- KWAHO schools
- Lab was used in training of international students.

### 3.5 SOLAR POWERED WATER TREATMENT STUDY

Ozonation is a method approved by the US Environmental Protection Agency for drinking water disinfection in centralized treatment plants. New micro plasma technologies developed at the University of Illinois at Urbana-Champaign have dramatically reduced the electricity requirements for ozone production and devices for PoU water ozonation are now available. Just as ozone and chlorine disinfection can take place at the point of use, so can procedures to reduce turbidity (improve water clarity). In this study we evaluated the impact of PoU turbidity reduction on user perceptions and on water quality.

The objective is to evaluate impacts of PoU solar powered ozonation on childhood diarrhea occurrence in Western Kenyan villages. To identify and address logistical, organizational, technical, and cultural challenges so that this research can be scaled-up with future funding.

SWAP research team managed to enroll study participants in 3 villages in Nyando Sub County and conducted census in the villages. Dissemination meetings were held with Health Management Teams at both County and Sub County levels.
3.6 **MOUNTAIN SAFETY RESEARCH VENTURI STUDY**

MSR Global Health had 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 principal 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.

![Figure 11: MSR Venturi Chlorine doser](image)

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.

3.7 **EARLY CHILDHOOD DEVELOPMENT STUDY**

Early Childhood Development (ECD) refers to the physical, cognitive, linguistic, and socio-emotional development of a child from the prenatal stage up to age three. These early years of life are a window of opportunity to lay a strong foundation for a child’s life. Proper health, nutrition, and early stimulation play a critical role for brain development and child well-being.

Without access to quality ECD, poor children often fall behind their more advantaged peers before they even begin school and as they get older, the gaps widen: they are likely to perform poorly in school, earn less as adults, and engage in risky social behaviors. Parenting behaviors and home environment determine a lot about a child’s developmental outcomes.

The following questions formed the basis of the study

1. What is the most cost-effective and scalable model of delivery?
   - Individual home visits are more personalized but expensive to implement at scale.
   - Group meetings are less personalized, but provide social support and are more scalable.
2. Do fathers matter?
   - No evidence whatsoever.
3. How can we design an intervention with sustained impacts over time?
   - There is little evidence of interventions with long-term impacts. Effects tend to fade-out quickly.
4. What determines changes towards better parenting practices?
There is poor understanding of the pathways of change leading to parental behavioral change and better child development.

A Pilot study was conducted in Nyakach and Nyando in Kisumu County and Kegondi in Vihiga County. Other activities included

- Protocol submission for the main study.
- CHMT meeting for sites identification and planning
- SCHMT meetings in Rachuonyo South and East and Sabatia Sub Counties
  Arrangement to get data for children between 6 –18 months in all the three sub counties
- GPS mapping across the three sub counties in possible meeting points
- Census
  Consenting in randomized villages
- Baseline survey
- CHVs training
- Curriculum sessions to fathers and mothers implementation

Completed Pilot studies in Nyando and Sabatia Sub-Counties. Census was done in the month of September 2018. Baseline survey was completed in November 2018. 40 CHVs and 4 Mentors were trained in October 2018. CHVs successful delivered ECD Curriculum session’s 1-3 activities for mothers in the 3 sites.

- The following activities will be implemented in 2019; Implementation of the rest of the session 4-16
- CHVs training in March 2019.
- Session monitoring and field visits
- Joint Household visits OF field officers and implanting CHVs.
- Mentorship by the mentor CHVs.

Figure 12: A child pointing the key messages: Love, play, talk, nutrition and wash
3.8 A nutritional Study implemented by Kisumu County Health Department

SWAP entered into an agreement with National Foundation for the Centers for Disease Control and Prevention on behalf of the Kisumu County Health Department to become the fund manager for Field Testing of Imaging device for child under 5 years old anthropometry in Manyatta A & B.

The following measurements were done for child (ren) by Nutrition department;

- Weight – measured with step-on electronic scales.
- Length (for children 0 – 23 months) or height (for children 24 – 59 months) – measured by height board.
- Mid upper arm circumference (for all children 0 and 59 months) – measured by wrapping a retractable tape around the mid-upper arm.
- The Auto Anthro system: a tablet that captures 3D images of the shape of the children from which their height/length and mid-upper arm circumference (MUAC) are calculated. The images do not identify the child.

The CDC/CDC Foundation project team trained teams of local anthropometrist who collected data from about 300 children aged between 6 to 24 months and another 300 between aged 24 to 59 months. The study commenced in September 2018 and will be expected to end by March 2019.

3.9 CDC Qualitative WASH research in Kibera_

SWAP was subcontracted by CDC to conduct a qualitative evaluation of the health impact of an innovative aerial distribution system for safe drinking water (Skywater) in Kibera informal settlement. The Skywater project was implemented by Shining Hope for Communities (SHOFCO). The study involved FGD to users and non-users of SHOFCO water in addition to that IDIs were also done to water vendors of SHOFCO and non SHOFCO. 8 Focus Group Discussions and 22 In Depth Interviews were conducted and transcripts submitted.

3.10 Evaluation of water treatment practices and WASH coverage of clinics and schools_

SWAP was sub contracted by CDC to conduct evaluation of P&G purifier of water in 2 Area Development Program for World Vision in Katitu and Pala.

- Households, clinics and schools were randomly selected for interviews.
- Rob Quick was the technical lead for the evaluation and SWAP research team collected data.
4 HR & ADMINISTRATION

4.1 Staffing by Gender
At the beginning of the year, SWAP had a workforce of 49 staff and by end of December 2018, a total of 45 staff. These staffs are spread out in 4 Counties where SWAP operates including Kisumu, Migori, Rachuonyo and Vihiga. The headquarters is in Kisumu and field offices are located in Kegondi in Vihiga and Uriri in Migori Counties respectively.

4.2 Staff changes
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, short listing and selection were done and the candidates placed. The staff recruited included Accounts Assistant, Assistant Project Officer and a Driver. During the year, one (1) employee tendered her resignation as Human Resource and Administration Officer. Recruitment of a new HR was done but the successful candidate declined to show up since his current employer had invested in him on capacity building and so he had to work for the organization for some period of time. The management decided to do internal promotion on the same position.

4.3 Strategic Plan
Strategic planning for 2018-2019 was done and shared.

4.4 Procurement
- 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 sold out an old project van (Toyota RAV 4 registration number KAS 603 J).

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 IISAH Foundation, Guest house, airtime and electricity Tokens.

4.5 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 29th September 2018, SWAP was saddened by the demise of Wilson Otieno who was a project Driver.
4.6 Policies Review

SWAP has policies which govern the organization and were reviewed as per the external audit findings and donor requirements. These includes; Finance, Procurement, Governance, Human Resource, Transport and Asset Policies.

5 FINANCE

The year 2018 was fairly good since the organization secured new donor funding but faced a couple of challenges which were triggered by prolonged general election process. The finance report is thus summarized as follows:-

- New donor funding were RAND Corporation for ECD study, CDC Qualitative (World Vision), CDC Foundation (Fund management), University of Illinois (Portes Foundation).
- Continued donor funding were HCM, CDC schistosomasis study, LSTM, SEI, University of Illinois, Path Stanford.
- Increase capacity building through partners’ workshops and training on good financial practices and policies.
- Improved financial data capture through payroll and QuickBooks software.

Challenges faced with financial stability included the following;

- Delayed disbursement of funds which has led to delayed implementation of activities traced to political instability after 2017 elections.
- Limited funding which has led to uncovered expenses by the donors which leads to overburden to IGA
- Unstable IGA income due to closure of Mumias sub D and other offices which were generating income from sales

To overcome the limitation listed above, SWAP will aim at;

- Writing more proposals to win donor funding
- Improving IGA by identifying new suppliers and doing business differently i.e. product and margin analysis.
- Cost reduction where donor support is limited
- Cash flow projection and forecasting
- Budget projection analysis and forecasting
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) Freeman MC, Quick RE, Abbott DP, Ogutu P, Rheingans R.- 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


20) Bobbie Person Owuor, Ogange L, Jefferds M E, Cohen A: 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,


