



WASH in primary schools Baseline Survey Report

WE REACH KAKAMEGA

March 2023



TABLE OF CONTENTS

List of Acronyms	3
1. INTRODUCTION	4
2. METHODOLOGY	5
2.1 Methods of Data Collection	5
2.2 Qualitative survey	5
2.3 Data collection and analysis (quantitative survey)	5
2.4 Limitations	5
2.5 Triangulation of Data	5
3. FINDINGS.....	6
4. DISCUSSION	8
5. RECOMMENDATION	9
6. CONCLUSION.....	9

List of Acronyms

MHM:	Menstrual Hygiene Management
WASH:	Water Sanitation and Hygiene
MOH:	Ministry of Health
MOE:	Ministry of Education
UNICEF:	United Nations International Children's Emergency Funds
ECDE:	Early Childhood Development Education
PTR:	Pupil Toilet Ratio
IEC:	Information Education and Communication
NGO:	Non-Governmental Organization
KACWASCO:	Kakamega County Water and Sanitation Company
KACRWASCO:	Kakamega County Rural Water and Sanitation Company

1. INTRODUCTION

School children in Kakamega County are sick and dying due to sub-standard WASH attitudes, behaviors, and facilities. This leads to unnecessary levels of student's absenteeism and poor performance. In addition, the lack of Menstrual Hygiene Management (MHM) and facilities mean that girls are stigmatized and experience isolation and rejection from their fellow students. Therefore, the project seeks to address this by empowering schools on WASH so that they can be their own advocates on WASH issues and ensure their sanitation facilities are up to standard. The project also seeks to ensure that there is consistent practice of hygiene habits among the children, supply of water and improved Solid Waste Management. The program's true strength is its ability to sustain itself through school empowerment and the establishment of self-help partnerships.

In response to the prevailing situation in Kakamega County, WE REACH has been working with the County Government of Kakamega through the Ministries of Health (MOH) and Education (MOE) from the WASH project's inception in 2020. WE REACH has organized and held an introduction meeting with representatives from the two ministries to identify and prioritize schools for the project. Initially, 15 schools were chosen with further tranches of schools added as the year progresses.

A baseline survey was conducted to determine the number of water-related sickness cases reported among children in schools in the identified respective schools by the Ministry of Education and Health. The schools that registered a significant high case count among the students, were selected to partner with us in this one year project. The initiative is being implemented in the following 10 schools in the Mumias East Sub-County:

Mahola Primary

Maraba Primary

Shibinga Primary

Isango Primary

Mwichina Primary

Khaunga Primary

Eshisenye Primary

Epanja Primary

Shianderema Primary

Emakhwale Primary

2. METHODOLOGY

2.1 Methods of Data Collection

The baseline survey used a mixed method approach that incorporated both qualitative and quantitative data collection methods. Multiple data sources were used to inform baseline survey for triangulation purposes. Data was collected at 2 levels that is at Early Childhood Development Education (ECDE) and Primary classes.

2.2 Qualitative survey

WE REACH provided the head teachers with the Three-Star Score Card which was used for the school assessment for WASH standards. The Three-Star Approach provides designs and guidelines to help schools meet the infrastructure requirements. Purposeful sampling was used to collect qualitative data. Specifically, criterion sampling was employed. This technique was used for the identification and selection of information-rich cases for the most effective use of limited resources. Criterion sampling involved identifying and selecting teachers that are especially knowledgeable about and involved with WASH in school issues at the different levels. The teachers selected for participation in the baseline survey are also to be involved in the project thus, they will be consistent information sources for tracking project progress as well as identifying changes as a result of the project. WE REACH provided the head teachers with the Three Star Score Card

2.3 Data collection and analysis (quantitative survey)

A team of 20 teachers were engaged, 2 for each school. The teachers were first trained on the data collection tools to administer the survey questionnaires in their respective schools. WE REACH developed questionnaires and presented them to the Health Teachers who represented upper classes (Grade 4-8) and ECDE teachers who represented lower classes (PP1-Grade 3) The two teachers per school liaised with class teachers from different classes to obtain correct data on pupils absenteeism rate, water-related illness, MHM issues and skin/oral infections.

All quantitative data was cleaned and exported to a statistical analysis software, EXCEL, for an in-depth analysis. A data analysis plan was developed and used in the data analysis phase. The analyzed data was presented in form of frequent tables and charts which will be used in the presentation of findings.

All qualitative data was analyzed manually.

2.4 Limitations

- Long distances to some school locations increased travel time within selected schools for the survey.
- Poor road infrastructure made it difficult and slowed travelling to some schools.
- Internet connectivity was also a problem that led to delay in transmission of data.
- Negative perception of respondents about NGO's on the basis that many NGO's go and collect information about them but they completely never get back.

2.5 Triangulation of Data

Different methods of disseminating the results will be employed taking into consideration the different needs of data users. The findings and recommendations from the survey, are going to be shared with Kakamega County Ministry of Education (MOE), Ministry of Health (MOH),

WASH Stakeholders, Mumias East Sub-County Health facilities and various Partners. They will use the data to monitor project progress and address challenges, provide evidence for decision making by the Kakamega County Water and Sanitation Company Limited (KACWASCO), Kakamega County Rural Water and Sanitation Company (KACRWASCO) and Project Management Team and identify project gaps and lobby for additional resources. The same will be used by WE REACH for evidence based planning in addressing the identified gaps.

3. FINDINGS

The collected data was tabulated, organized and analyzed using descriptive and inferential statistics as follows:

STANDARDS & GUIDELINES FOR WASH INFRASTRUCTURE IN PRE-PRIMARY & PRIMARY SCHOOLS IN KENYA

Prepared by: Ministry of Education, Ministry of Health, Ministry of Water and Sanitation

Table A: Rating Details for the Assessment of condition of School WASH Infrastructure

Grade	Score	Description	Details
A ★ ★ ★	>80%	Excellent	Meets design standards, condition id fit-for-purpose, fully operational, no immediate repairs needed
B ★ ★	60-79%	Acceptable	Mostly meets design standards, condition is fit-for purpose, fully operational, but minor repairs needed
C ★	40-59%	Poor	Basic design, condition is partially fit-for-purpose, partially operational, and substantial repairs are needed to improve condition
D	<40%	Dangerous	Design does not meet basic standards; condition is not fit-for-purpose and structure should be decommissioned

Table B: Record of WASH Score card

School	Water		Sanitation		Hygiene	
	Score	Grade	Score	Grade	Score	Grade
Mwichina	34%	D	33%	D	27%	D
Shianderema	34%	D	33%	D	27%	D
Emakhwale	40%	C	33%	D	27%	D
Shibinga	63%	B	33%	D	33%	D
Khaunga	40%	C	33%	D	27%	D
Isango	40%	C	33%	D	27%	D

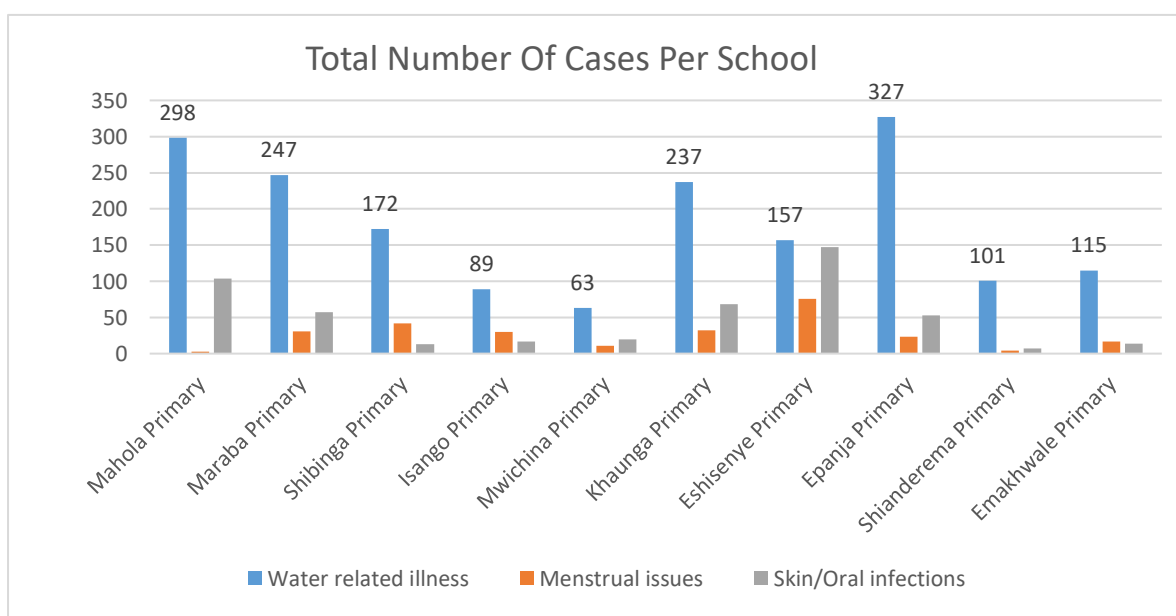
Mahola	46%	C	33%	D	33%	D
Maraba	51%	C	20%	D	13%	D
Epanja	51%	C	27%	D	27%	D
Eshisenye	57%	C	20%	D	27%	D

Section I: Total number of cases received over 4 weeks in the 10 chosen school

Schools	Water related illness	Menstrual issues	Skin/Oral infections
Mahola Primary	298	3	104
Maraba Primary	247	31	57
Shibinga Primary	172	42	13
Isango Primary	89	30	17
Mwichina Primary	63	11	20
Khaunga Primary	237	32	68
Eshisenye Primary	157	76	147
Epanja Primary	327	23	53
Shianderema Primary	101	4	7
Emakhwale Primary	115	17	14
Total No. of Cases	1806	269	500

As depicted in the figure above, a large number of cases of illnesses related to water, menstrual problems, and skin/oral infections were reported throughout the schools.

Section II: Total number of cases per school in a month



An additional representation of the total number of cases reported at each school over a four-week period is shown in the graph above. The baseline survey revealed that each school encountered high cases for a period of one month, which resulted in a high percentage of absence. The total number of water-related disease cases received in the 10 schools for a period of four weeks was 1806, according to the baseline survey. In all 10 schools, there were a total

of 269 cases of menstrual problems among girls in grades 4 through 8. Menstrual hygiene management is an important subject that hasn't been given much attention in schools, but it needs to be. In all 10 schools, there were 500 occurrences of skin/oral infections; the majority of the affected pupils were in lower grades, from PP1 to Grade 3.

4. DISCUSSION

The qualitative analysis done by WE REACH in the selected 10 schools was done by observing the WASH conditions of the schools. Data collection was carried out in the schools site with prior communication and due verbal consent from the respective head of schools, willingness from the Health Teachers and ECDE representatives was also sought before they were requested to fill the questionnaires and were allowed to enquire any clarification from the survey team. WE REACH used the Three Star Approach which was developed by UNICEF to assess and rate the schools' WASH Standards. The three-star approach is based on the fundamental principle that expensive water, sanitation and hygiene infrastructure in schools is not a pre-condition to meeting health goals. The approach focuses on initial simple inexpensive steps that all students wash their hands with soap, have access to safe drinking water and are provided with clean, safe, gender segregated toilets at schools every day. Our findings show that most of the school WASH facilities are significantly below the minimum WASH standards, partially due to the lack of resources and partially due to failure to prioritize WASH facilities, budgets, maintenance, and operations. Most schools fall short of the Pupil Toilet Ratio (PTR) requirements for both boys (35) and girls (25) when it comes to latrines because the majority of structures are poorly placed and only receive a limited amount of use. The hand washing stations at the schools are in disrepair, some of the tanks are leaking and some schools lack water sources, thus the tanks are instead filled with cobs, empty plastic bottles, and containers.

School children are exposed to various types of waterborne diseases such as diarrhea, typhoid, bilharzia, skin and oral infections such as ringworms, boils and mouth rash. There are different factors that contribute to the occurrence of these diseases in different schools. The infection by water borne diseases, skin and oral infections was independent of schools. There was significant relationship between the class category according to age and the infection by parasites that are water borne. The lower age group of 5-10 years being more infected. The schools with poorer water quality, sanitation, and hygiene had more infections by the water diseases, skin and oral infections. There was significant correlation in hand washing and infection indicating the leading factor associated with infection of water borne diseases in the area. WE REACH recommends that health workers provide prompt treatment to the infected and also undertake regular deworming. Schools should also adhere to the sanitation and hygiene standards set by Ministry of Health and Public Health Act CAP 242. KACWASCO should extend the supply of treated water to all the primary schools in Mumias East Sub-County and other schools in Mumias.

According to the MHM baseline survey, girls' could not maintain menstrual hygiene in schools which restricted their school attendance and participation. Girls also missed class due to fear of personal embarrassment and ridicule from others, particularly boys. Due to inadequate menarche preparation, availability to absorbent materials, as well as to water, soap, and

seclusion while at school, school girls were unable to practice proper MHM. Since there is little information and conflicting viewpoints regarding the biological process of menstruation, it is clear that MHM needs to be strengthened in reproductive health education in order to empower girls. This can be done by including comprehensive MHM information in the curriculum for school-based sexual, reproductive, and health education so that teachers, students, and both genders are equally informed and can help girls practice MHM effectively. Poor WASH facilities discourage girls from using the facilities in schools; the majority of girls choose to stay at home until their periods are finished instead of using the facilities at all. Efforts in school sanitation to address girls' participation in education have largely ignored menstrual management in latrine design and construction with privacy and water availability remaining a challenge. In order to implement adjustments to current WASH structures that are MHM friendly, including the provision of suitable disposal systems and appropriate changing spaces within toilets, WE REACH advises serious advocacy and open discussions between school officials and key stakeholders. Teachers should work towards creating a supportive environment for girls that includes educating learners, including boys, to be understanding. Using the many valuable insights from this survey, policies can be developed to make schools in Kakamega County MHM friendly environments where girls can feel comfortable and safe when menstruating or not.

5. RECOMMENDATION

- Boreholes and non-functional boreholes to be rehabilitated so as to increase availability of basic water in schools
- All schools must have girl friendly, disability friendly and ECDE friendly latrines, incinerators, and hand washing facilities constructed and appropriate systems must be put in place for continued functionality of the facilities.
- There is need to supply schools with MHM and WASH IEC materials and to resuscitate their School Health Clubs.
- For those schools fetching water from unprotected sources like rivers and unprotected springs they have to use water guards in the interim.
- Schools should work closely with surrounding communities and identify more workable and sustainable ways to locally finance water treatment, soap provision, construction, and repair of WASH facilities in schools.
- Schools should promote increased WASH promotional activities in schools and surrounding communities spearheaded by pupils, teachers, and local theatre or drama groups.

6. CONCLUSION

The baseline survey results presented in this report should be seen as a basis to plan and design interventions to accelerate progress in water, sanitation, and hygiene in schools. This can be done by capacitating relevant stakeholders, schools and structures at the community level through trainings and support.

WATER

- Schools do not have access to basic water since most boreholes are broken down, tanks have leakages and the available ones need to be rehabilitated.
- Across the 10 schools, boreholes are shared between the schools and communities and it is causing conflicts.
- Most schools do not have boreholes and more boreholes have to be drilled in schools.

SANITATION

- Schools do not have ECDE friendly and girl friendly latrines hence more latrines have to be constructed respectively.
- Address gender-related needs and roles and have physically separated facilities.
- There are inadequate latrines for both boys and girls in schools due to high enrolment levels.

HYGIENE

- Schools do not have MHM and WASH IEC materials that can be used to disseminate knowledge among the pupils and teachers.
- There are inadequate hand washing facilities in schools thus, more hand washing facilities have to be put in place.
- There is no menstrual hygiene compartment in schools that accommodate girls menstrual hygiene needs.