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## The Status of Sanitation Facilities in Regard to Female Learners in Public Day Secondary Schools of Ekereny Division, Nyamira County Kenya

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### **Abstract:**

*Appropriate sanitation facilities for girls are those that give them maximum advantage in terms of health, security, comfort, adequacy, privacy and dignity, whereas regular learning refers to the percentage of content covered by the students in the classroom, amount of time students are active in the learning process and the extent to which students accurately complete the assignments they are given. This study determined the status of sanitation facilities in public day secondary schools of Ekereny Division, Nyamira County Kenya. The objective of this study was to explore the status of sanitation facilities in public day secondary schools in Ekereny Division. Secondary school female students were targeted because of the special and girl-specific needs and changes that occur during adolescence that require special consideration when providing school sanitation facilities. This is important because sanitation needs for girls differ significantly during adolescence and after, in terms of personal hygiene unlike boys. The study was guided by two theories; Gender and development theory and liberal feminism theory. The study targeted all female students and principals from the 22 public day secondary schools in the division. Simple random sampling was used to select a sample of 7 schools whose principals were automatic respondents. Stratified random sampling was then used to select at least 7 students from the four strata (Form 1, 2, 3 & 4) in the 7 schools resulting to a sample size of 224, however only 218 girls and the 7 principals responded. The study adapted descriptive survey design. Qualitative data from the principals' and the students' responses was analyzed by identifying themes and descriptors about the sanitation situation in their schools. Quantitative data from the students' and principals' responses was summarized and presented in frequencies tables, means percentages and bar graphs.*

**Keywords:** Child friendly schools, Ekereny, female Learners, latrines, public day secondary schools, sanitation

### **1. Introduction**

A school is a place where students go to acquire knowledge and skills, for survival, career and life growth, but sanitation is a factor affecting girls' learning. Lack of a conducive school environment is the leading cause of low retention of girls in school with poor sanitation being specifically cited as a leading determinant of whether adolescent girls turn up for class or not. Inadequate sanitation facilities are a one reason for some children's failure to go to school Omwoga (2010). For instance, lack of separate latrines and other necessary facilities during menses discourage adolescent girls from coming to school and spend better part of school time elsewhere. (FAWE, 2004).

UNICEF, (2010) and Child-Friendly School (CFS) emphasizes that school should operate in the best interests of the child. Educational environments must be safe, healthy and protective, endowed with trained teachers, adequate resources and appropriate physical facilities. Within them, children's rights must be protected and their voices must be heard. Learning environments must be a haven for children to learn and grow, with innate respect for their identities and varied needs. It is therefore important for any school to safeguard the rights of students as spelled in the constitution of Kenya (2010).

A study on management of physical resources and its impacts in public secondary schools in Kisii central district by Esther (2012) concluded that majority of schools did not have adequate facilities, and the available facilities were in a poor state of repair. It was recommended to school administrators to adapt a culture that would help address the issues of renovation, repair and modernization of existing facilities to suit the demands of girls (Esther, 2012).

WHO (1997) argues that sanitation is a public good and its improvement has greater benefit when a whole community achieves it. In families where girls receive hygiene education, there is less ill health and better school attendance among their children (WHO, 1997). Students can act as potential agents of change within their homes and communities through their knowledge and use of sanitation and hygiene practice learned at school. An environment where these hygienic needs are met, leads to improved dignity and attendance, thus improving girls learning and consequently, their performance Nyaigoti (2013).

In a study on the condition of hygiene and sanitary facilities in schools, reported that principals did not want to cooperate. School sanitation was so marginalized that it would be of no use to inspect Nansereko (2010). They take sanitation as a luxury not as a basic need without realizing that it can do harm to learning especially of girls.

FAWE (2004) realizes the importance of involving girls in decision regarding sanitation and hygiene in order to give priority to their special need. If these conditions are created, girls will come to school, enjoy learning, learn better and take back to their families concepts and practices on sanitation and hygiene. In this way, investment in education is more productive. This will curb the absence of approximately 4 days every 4 weeks that may result in the girl missing 10 to 20 percent of their school days. Inevitably, it will be difficult for a girl who misses so much schoolwork to keep up academically Omwoga (2010).

## 2. State of School Sanitation

The gender needs in terms of personal hygiene and sanitation differ significantly during adolescence. It is therefore critical to take gender needs and potential gender differentiated impacts into consideration in the designing of school sanitation facilities. UNICEF (2010) emphasizes on the importance of school sanitation facilities, which are built to accommodate menstruating girls' specific needs for privacy, space, washing facilities and correct disposal or cleaning of menstrual pads. This is complimented by Gujjar (2010) who says that while affecting all school-aged children, inadequate sanitation facilities hit girls more, pushing many out of the classroom for lack of privacy and dignity during the crucial stage of adolescence. Elizabeth (2010) on the same reports that in some cases girls put up with the deplorable conditions only to leave when they begin to menstruate.

In Malawi and South Africa as reported by Human Rights Watch (2001), girls' absentee themselves from learning institutions during menstruation, sometimes pretending to be sick, due to the conditions of toilets and water at school. It further asserts that provision of safe water and sanitation facilities is the first step towards a healthy physical environment benefiting both learning and health. However, provision of mere facilities does not make them sustainable or produce the desired impact. It is the use of latrine and related appropriate hygiene behavior that provides health benefits Biran, & Hagard (2003).

According to UNESCO (2003), in Ethiopia, fewer than half the schools had latrines and only one school had a separate latrine for boys and girls; while in Ghana, only a third of schools had latrines and in many cases, they were unfit for use. A study on the provision of educational facilities in primary schools in Rigoma division in Nyamira County by Motuka (1999) found out that 5.6% of the schools that were involved in the study had been closed down due to lack of toilets. The closure was directed by the public health officials until the pit latrines were constructed. This uncondusive school environment altogether brings learning to a standstill impacting the regular learning of both boys and girls hence influencing negative performance Nyaigoti (2013).

Ngure (2009) studied on sanitation and hygiene situation in public primary schools in Thika municipality, remarked that most schools had semi-separate (back to back design) toilets, were shared, or boys' and girls' toilets were constructed close to each other. When girls reach puberty, they drop out of school, go late or leave early due to embarrassment of having to share latrines with boys. They do so because of lack of privacy and security, even from their colleague students during the use of the facilities.

Human Rights Watch (2001) observed that sexual violence against girls in South African schools is due to latrines situated close to public roads, next to classrooms, adjacent to boys' latrines and, in most cases the doors are missing or broken presenting an opportunity for harassment from outsiders, other students and sometimes adults in the school. If there are no latrines at school, girls go far into the bush to relieve themselves, for fear of being seen, where they may be at risk of snake bites or even sexual attack. UNICEF (2005) noted that education for girls can be supported and fostered by something as basic as a girls-only toilet arguing that lack of access to separate and decent toilet at school is impeding girls' access to education. In Bangladesh, a school sanitation program increased girls' enrolment by 11%, a level that is beyond the reach of conventional educational reform (Cairn cross, 1998).

### 2.1. Theoretical Framework

This study builds on Gender and development theory.

#### 2.1.1. Gender and Development Theory

The theory posits that women's poverty is as a result of their subordination in their relationships with men and the influence of colonial and neo-colonial oppression. It is based on the assumption that men and women have different Gender Roles and Power with Different Gender Interests. Gender and development perspective gears towards equal participation of men and women regarding matters affecting both of them (Woolcook & Narayan, 2000).

Men and women, boys and girls should therefore, be given freedom to make choices that promote their dignity. Sanitation provision in schools should take the design of promoting girls privacy, security, comfort safety and health. There is need for women to be involved in decision making regarding sanitation and hygiene in order to give priority to women and girl's special needs.

## 3. Methodology

The study employed descriptive survey design. Kothari (1985) indicates that descriptive survey is concerned with describing, recording, analyzing and reporting conditions that exist or existed. Kerlinger (1973) also argues that survey method is widely used to obtain data useful in evaluating present practices and providing basis for decisions making in a given situation. Descriptive research design was used in identifying challenges faced by the girl child in mixed day secondary schools in Ekerenyo Division. This design enabled the researcher to collect and analyze a variety of sanitation related data from school principals and female students in the area of study. The population comprised of all female students and all school principals of public day Secondary Schools of Ekerenyo Division. According to Nyamira North District Education officer, by May 2015, there were 1506 female students and 22 principals respectively. Simple random sampling technique was used to select schools and girls to take part in the study. Kothari (2003) says that a sample of between 10% and 30% is appropriate for a study. He argues that in this method, each element has an equal probability to be selected as a sample. This is because the technique is bias free and no element can be selected twice as a sample. The girl students

were purposively selected to participate in this study. They were required to give their experience concerning sanitation facilities in their schools. Principals gave background information; challenges experienced by female students, and suggested some of the solutions to sanitation problems relating to girls’ regular learning. The girl students were stratified into four strata according to grade levels -form 1, 2, 3 and 4 and then girls proportionally randomly selected from each stratum. At least 8 students from every stream were expected to respond to the questionnaire, however 218 questionnaires were responded to by girls and, 7 others were responded to by the school principals totaling to a sample size of 225. The instruments used in this study were: questionnaires for female students and principals and the observation checklist. A questionnaire is a research instrument consisting of questions and other prompts for the purpose of gathering information from respondents ((Mugenda & Mugenda, 2003). The study used two questionnaires which were administered to 218 girls and 7 principals. Gay (1992) observed that questionnaires give respondents freedom to express their views or opinion. An observation checklist was used not only for validation of the principals’ and students’ responses but also for the purpose of describing the state of sanitation in the schools, from the researcher’s own perspective.

3.1. Results and Analysis

3.1.1. State of School Sanitation Facilities.

The objective of this research question was to find out how the respondents could describe the state of sanitation facilities in terms of their accessibility, usability, cleanliness, security and safety in the context of girl students’ concern. The state of various school sanitation facilities is presented below.

3.1.2. Latrines

When girls were asked to describe the state of latrines in their schools, where they had an option of choosing between 1= “enough- there is no crowding”, 2=“not enough but we somehow manage”, 3=“too much overcrowded” and 4=“overcrowded- some girls go elsewhere (home, bushes, neighbors’, boys’)”. This implied that higher scores mean poor status of sanitation. The overall mean as per the responses was 1.9, which was more like “not enough but we somehow manage.”

The results on Figure 1 indicate that the respondents description of the status of latrines is generally “not enough but we somehow manage.” In most secondary school, latrines are an issue in schools and there is need of attention, an indication that though latrines are provided, the girls are still struggling to access them. It is clear that majority of the girls 165, (75.5%) felt that the latrines are not enough although they could somehow manage. This was followed by those who thought that the latrines were enough (no overcrowding), 39 (17.9%). Another 10 (4.6%) respondents mentioned that the latrines were too much overcrowded while 4(1.8%) of the respondents said that latrines are overcrowded and therefore used other places other than the school facilities (“home, bushes, neighbors’, boys’). This information is represented by Figure 1 below.

This study concurs with a research conducted by Seka(2012) on causes of Drop out among Girls in Selected Mixed Day Secondary Schools in Kasarani District, Nairobi County, where the researcher sought to know the effect of unsafe school environment for girls and its effect on the girls’ drop out. An overwhelming majority of 130 (72%) of the respondents indicated that there is unsafe school environment in the school and Some 29 (16%) disagreed to the statement.

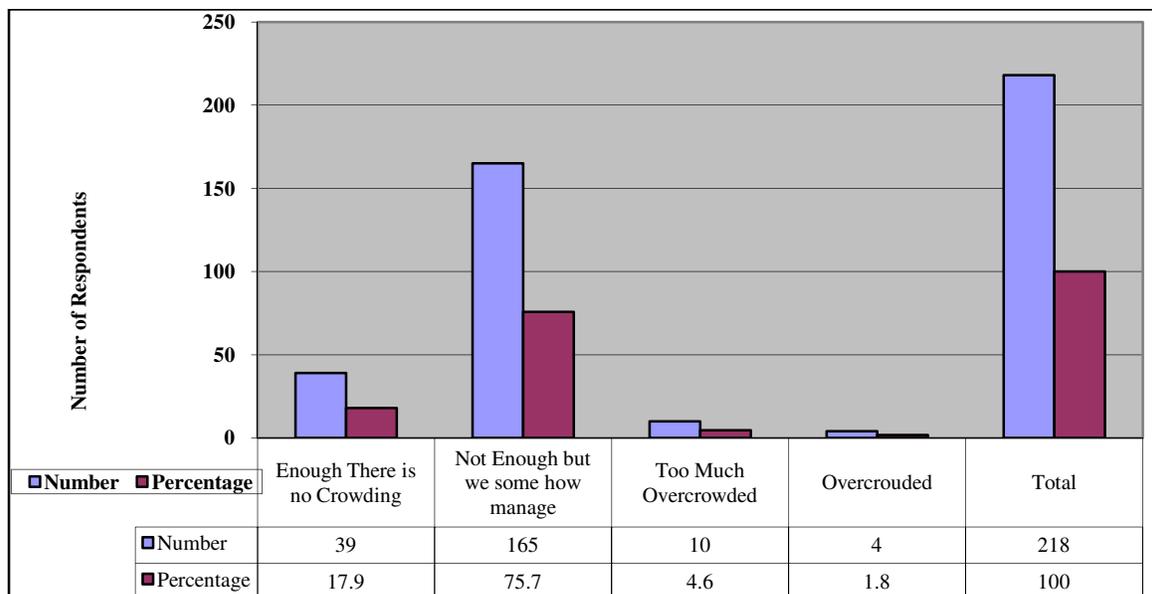


Figure 1: Bar Graph on the State of Latrines in the Public Day Secondary Schools

These findings resonate with another study on Adequacy and utilization of sanitation facilities in secondary schools in Mpigi District Uganda by Nansereko (2010). The findings indicated that a relatively high percentage (47.5%) of the latrines were inadequate while 40% held that the facilities were relatively adequate. This shows that important facilities such as toilets in schools is an issue of

concern and therefore the relevant authorities need to take appropriate measures to ensure the students are protected from harm that might arise out of these poor facilities.

**3.1.3. Bathrooms**

When the girls were asked to comment on the availability and usability of bathrooms in their schools where they had an option of choosing from; 1= ‘there is no crowding’ 2= ‘not enough; but we somehow manage’ 3= ‘too much overcrowded’ and 4= ‘not there at all.’ The mean of 218 girl students’ responses collected was of 3.56. This implied that the higher the value, the poorer the status and this implies that girls generally did not have bathrooms at all. Figure 2 below points out that from all the schools visited, a high number of respondents 176(80.7%) said that there were no bathrooms at all. This was followed by those who felt that the bathrooms were not enough 26(11.9%). The others were 14(6.4%) whose opinion was that there was no overcrowding while the rest 2 (0.9%) indicated that there was too much overcrowding of the facility. These findings are illustrated by the figure 2 below

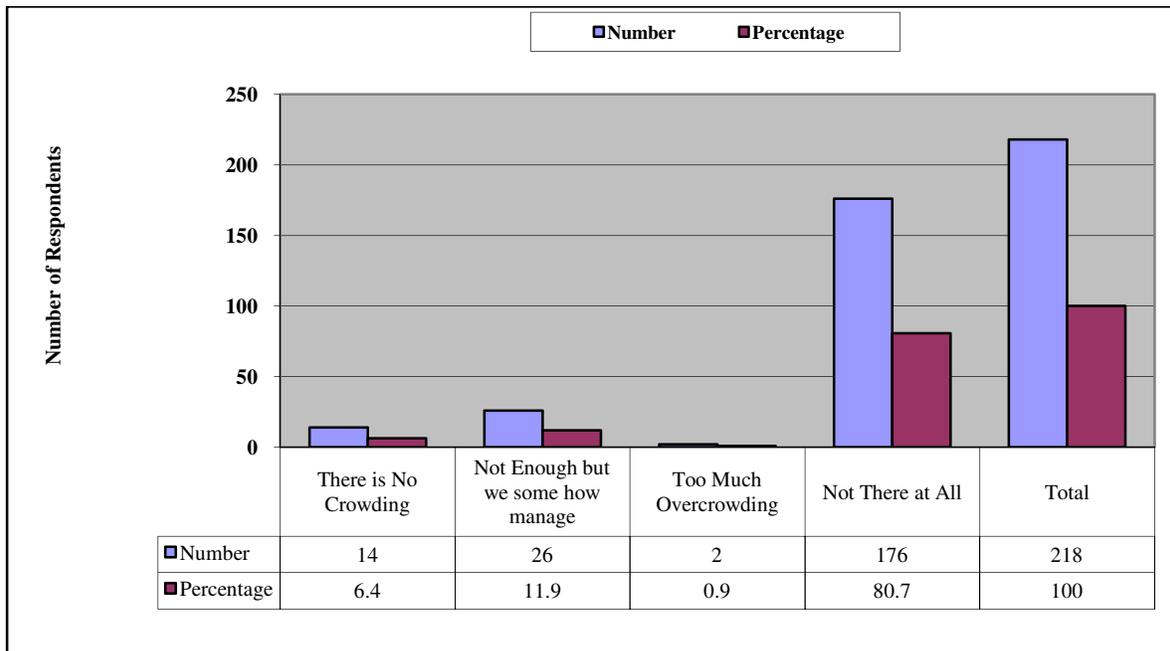


Figure 2: Bar Graph on the State of bathrooms in Public Day Secondary Schools

This was the least rated aspect of sanitation given that it was not viewed important even by the administration when putting up school infrastructure. The whole assumption is that their importance is minimal in schools compared to other sanitation facilities.

**3.1.4. SOAP**

In a set of choices where girls were asked to describe the state of sanitation in their school in relation to soap availability and adequacy, there 218 girls reacted to the questionnaire. They had an option of choosing between 1= ‘always sufficient’ 2= ‘sometimes sufficient’ 3= ‘sometimes not there’ and 4= ‘never there at all.’ The mean of their responses was 3.10, which indicated that the soap is ‘sometimes not there.’ A relatively high number of girls 127 (58.3%) said that there was no soap available at all, 44 (20.2%) of the respondents indicated that soap was always sufficient, 26(11.9%) said that sometimes soap was not there and 18(8.3%) indicated that soap was sometimes sufficient. Figure 3 is a bar graph for the responses concerning soap supply in the schools.

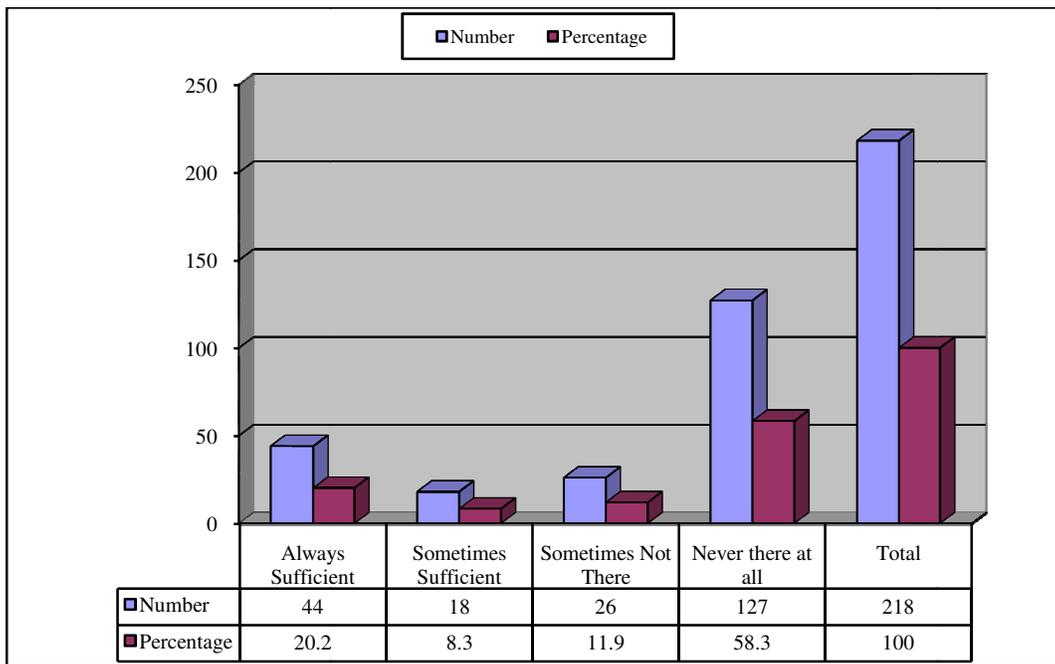


Figure 3: Bar Graph the State of availability of soap in Public Secondary Schools

Buckets When girls were asked to describe the state of bucket/basins availability in their schools where they had an option of choosing between 1= “always available” 2= “available but insufficient” 3= “sometimes available /sometimes not available” and 4= “never available”. The 218 responses resulted to a mean of 2.49, indicating that they can generally be described as “available but insufficient”.

Figure 4 below shows that indeed majority 78 (35.5%) of the respondents agreed that buckets were available but not sufficient. Those who were of the opinion that buckets were not available were 73(33.5%) while 53(24%) said that buckets were always available and 17(5.5%) indicated that buckets were sometimes available and sometimes not available. Fig 4.4 below is bar graph for the responses on buckets availability.

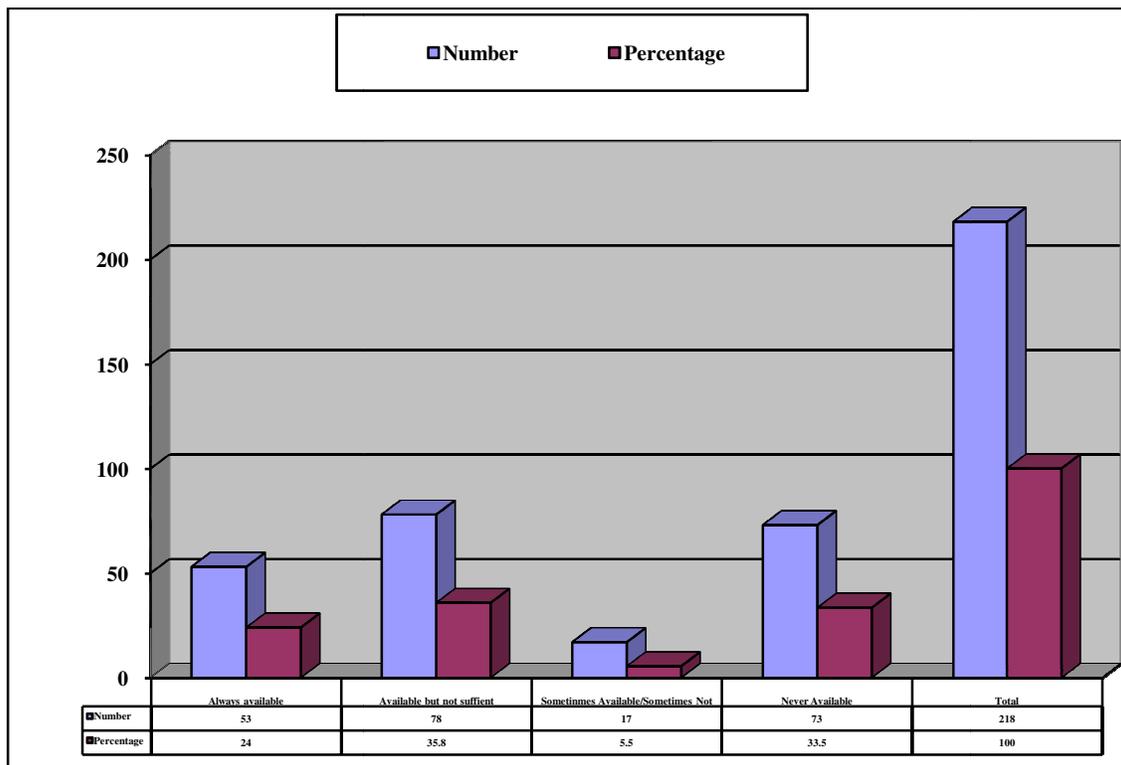


Figure 4: Bar Graph on Availability of Buckets

These findings agree with a similar research by Fred Chikwanu, (2015), on “evaluation of the implementation of the school wash programme in Choma district of Zambia” which showed that different types of facilities were available in schools. The study indicated that a total of 390 hand washing facilities were in schools though some were not in condition.

3.2. Sanitary Disposing Bins

The respondents were required to choose from the given options to determine whether the sanitary disposing bins were available in their schools where 1= “always available” 2= “available but insufficient” 3= “sometimes available sometimes not available” and, 4= “never available.” 218 respondents averaged 3.12 implying that the sanitary disposing bins could be generally described as “s=sometimes available and sometimes not”

Figure 5 below indicates that majority of the respondents 139 (63.8%) said that sanitary disposing bins were not available in their schools. This was followed by those whose opinion was that sanitary disposing bins were always available with 49(22.5%), a small number of the respondents 19 (8.7%) said that the sanitary disposing bins were available but insufficient. However, there were also those who were of the opinion that sanitary disposing bins were sometimes available or sometimes unavailable with 9(4.1%) of the respondents. This was particularly so, as revealed by school principals because most local schools in the area of study used pit latrines which could be used for disposing sanitary pads.

In Uganda, a study on Menstrual hygiene in Ugandan schools: an investigation of low-cost sanitary pads was conducted by Crofts and Fisher (2012) Commercial waste management services for used non washable sanitary products were nonexistent and further reveals that in all but a few latrine blocks no containers were found to dispose of used sanitary pads; none were found in bathing shelters. Consequently, 65% of girls threw used materials into pit latrines at school. This was considered suitable though it resulted in latrines filling up quickly.

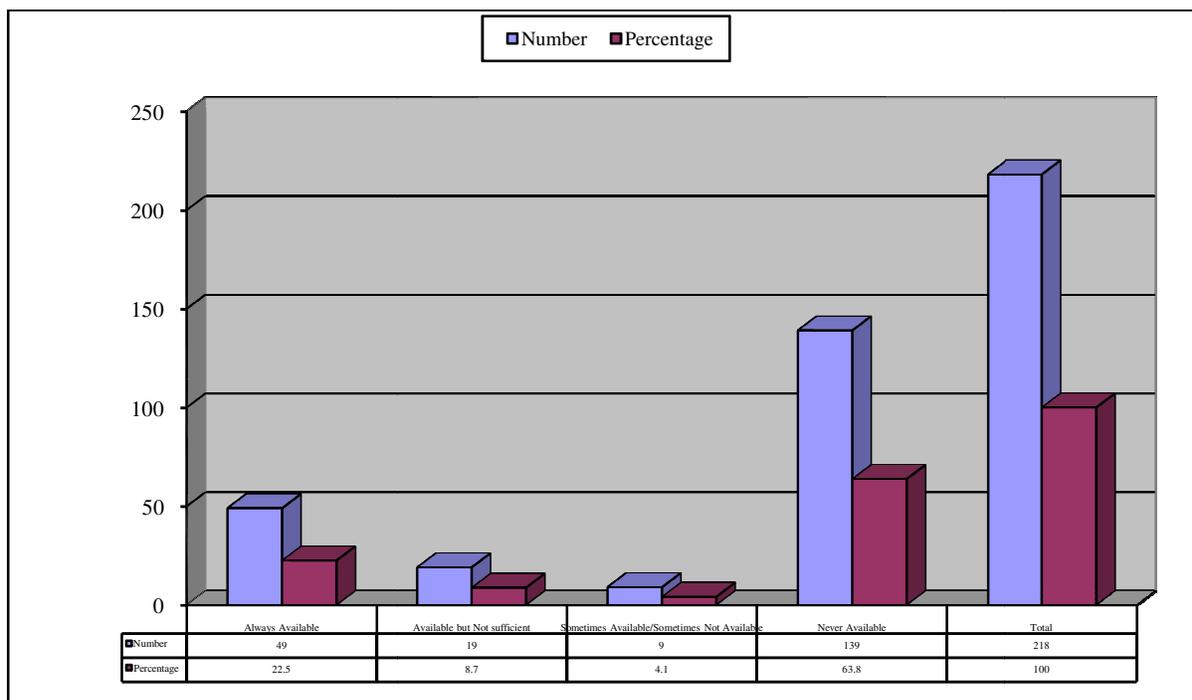


Figure 5: Bar Graph on Sanitary Disposing Bins

3.2.1. Water

The girls were asked to describe the state of water in reference to water availability and adequacy. They were given the options; 1= “always available,” 2= “available but insufficient,” 3= “sometimes available sometimes not available” and, 4= “never available.” Water could generally be described as “available but insufficient in schools” because a mean of 2.07 was obtained from the 218 responses.

From Figure6 below it can be deduced that almost a half 100 (45.9%) of the respondents observed that water was “always available” in their schools. This meant that learners were supplied with water. Those who indicated that water was sometimes available and sometimes not available were 45(20.6%), 37(17%) were of the opinion that water was available but not sufficient, while 36(16.5%) of them showed that water was never available. Fig 4.6 below is pictorial view of the distribution of responses on water availability.

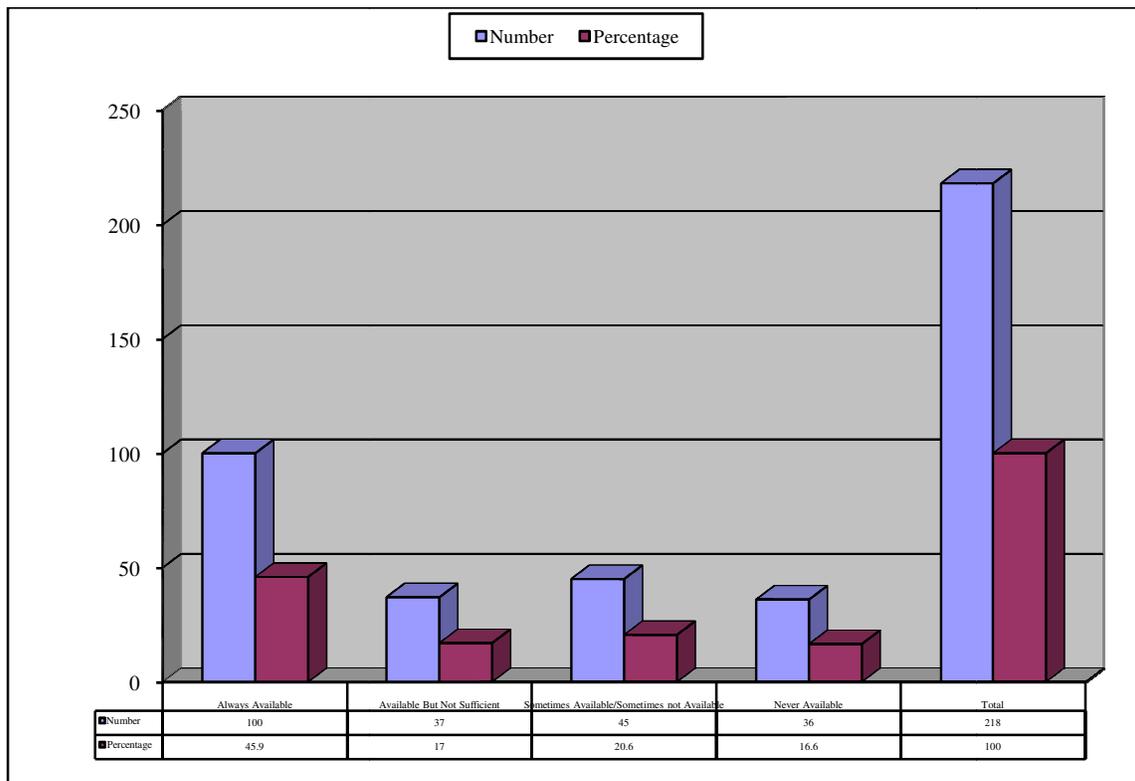


Figure 6: Bar Graph on Availability of Water

This finding agrees with another research on “Assessment of Sanitation Facilities in Public Primary Schools in Kajiado Central District” by Gisore (2013) whose findings indicated that water availability was reliable and visible in most schools in Kenya. Water was either piped by the local water authority from a central source, normally a borehole. Some schools relied on rainwater as the main water source despite being insufficient.

**3.2.2. Water Sources**

When girls were asked to state where they access water for sanitation from where they had the following options to choose from; 1= “piped water” 2= “rain water” 3= “borehole/well” 4= “river” and 5= “Others.” From Figure 7 below, it was observed that a considerable portion of the respondents 85(39.2%) draw water for their use from the river followed 49 (22.6%), there are those who relied on rain water, 40 (18.4 %) of the respondents said that they access piped water, 39(18 %) respondents indicated that they draw water from the borehole while the rest 5(2.3%) got water from other places (home, no water in school).

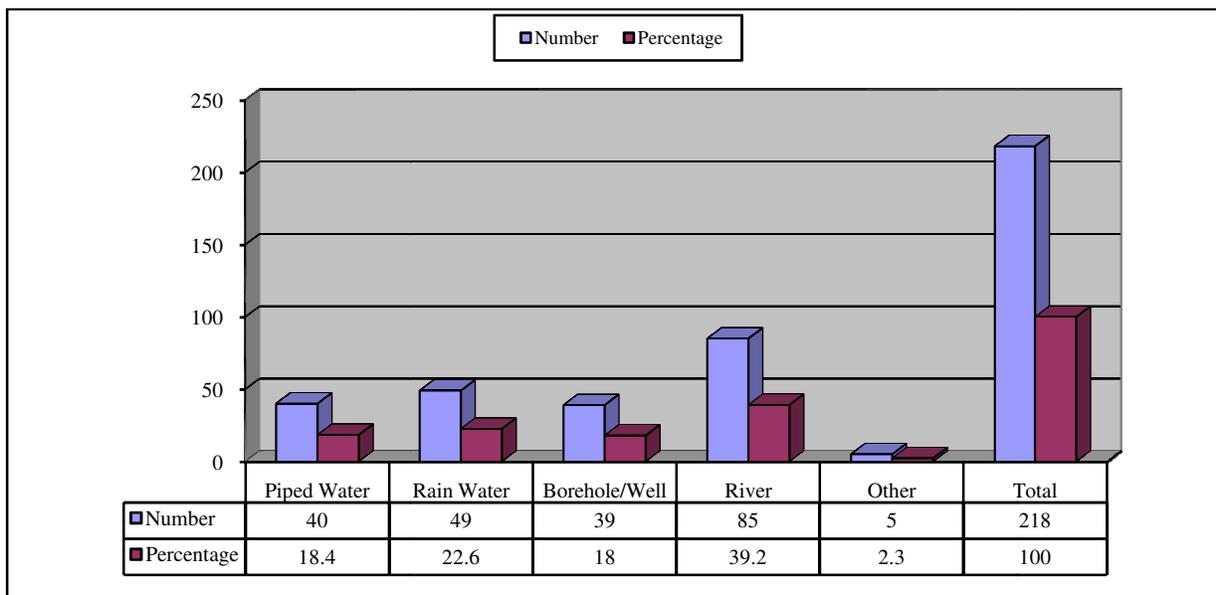


Figure 7: Bar Graph on Water Sources

The several aspects of sanitation facilities discussed above concerning state of sanitation facilities range from insufficient to not there at all. The item like the bathroom is not availed in most schools, a clear indication that they are assumed not to be part of school sanitation facilities. It can therefore be concluded that they are not sustainable. School girls struggle accessing them hence making school un-conducive for girls.

#### 4. Discussion

The study assessed the state of sanitation facilities in the 7 sampled schools. The state of sanitation facilities was viewed from their availability, adequacy, security, privacy and comfort according to the girls' needs. This was in view of the fact that there are differences in the need and use of the facilities according to gender. Their description was based on the perspective of the school principals and the girl respondents. The sanitation facilities described were latrines/toilets, bathrooms, soap, basins/buckets, sanitary pads disposing bins and water.

The results indicated that sanitary pads were generally not provided in schools. The problem seemed not to be of concern to the school administration as they did not have adequate sanitary disposing bins. Although some of the principals implied that there is no need for such bins because their schools use pit latrines, this may not explain fully their absence because the other needs are not also provided as per the needs of the girls, in terms of security, adequacy, availability health, comfort, privacy and safety.

The researcher found out that majority of girl respondents (75.5%) described the state of the latrines as not enough although they could somehow manage. This view indicated that most of the schools did not provide appropriate latrines for the wellbeing of the learners, especially girl learners. Furthermore the respondent girls could experience harassment from boys and outsiders when using their latrines. It was also observed that, despite most principals feeling that the latrines were safe and secure; a substantial number felt they were inadequate. This was construed to be interference to the girls' security, privacy and comfort while in school.

It was also observed that over 80% of the respondents did not have bathrooms in their schools at all. This could be described as pathetic because, although both boys and girls spend same hours in schools, the girls need bathrooms more than boys because of their need to bathe, change clothes and pads, especially during their times of menstruation. This would change the school environment differently for girls, and interfere with their regular learning.

The study revealed that almost 60% of respondents did not access soap at all in their schools, with the rest indicating that it was not sufficient. It was also found that most of the respondents did not have sufficient buckets, and they were not specifically for their use. They indicated that they could share among themselves and, sometimes for cleaning their classrooms and fetching water for other uses in schools. This is despite the fact that girls need the buckets and water much more than the rest of the school community, therefore affecting their learning in school differently.

The study showed that almost 64% indicated that sanitary disposing bins were completely not available in their schools. The principals claimed that this was because most local schools used pit latrines which could be used for disposing sanitary pads. It was also found that less than half the respondents could describe water as "available always" in their schools. Indeed although all schools had access to some source of water majority indicated that it was never sufficient for all their uses. The most common source of water was nearby rivers, which could be accessed by learners from time to time. Other sources were boreholes and harvested rain water, which were not permanent.

The study revealed that almost 67% implied that they experienced water problems in their schools. This meant that the available water was not enough to meet their sanitation requirements and thus they could spend time looking for water for both the school and personal use. Learners perceived some actions like being sent to fetch water from the river as a way of punishing those who had committed mistakes. Some of the respondents also indicated that they could skip school if in mistake or in their time of highest need for water, during their periods, rather than be punished by fetching water. Although any of the learners (boys or girls) could feel same towards punishment, girl learners' need for water becomes a bigger as they do not fetch for their use but for everybody despite their specific personal need for the water.

The respondents indicated that they were distressed by the duty of fetching water for cooking their food. Some reported that they sometimes could be asked to fetch water during class time. The researcher interpreted this loss of class time as negatively affecting regular learning. Although as reported by some respondents that stomach pains and other illness were due to water problems, could not be verified, the mere psychological notion that it is related to the water make the water problem a course of discomfort, distress and therefore lead to disrupted regular learning. The researcher perceived this as a disruption of regular learning, as respondents could not be comfortable to concentrate in class. It could also be difficult for a student who would be overworked fetching kitchen water to actively participate in class activity. This could be a bigger problem for girls in schools where water fetching could be perceived as a girls' society designated role.

Some principals indicated that water was generally a problem to every school going student, however it seemed to make little difference between boys and girls. The researcher observed that when water is only provided for hand washing, girls' special needs were not considered. This could make school environment un-conducive for girls as they need water much more because of their special needs. Most principals also revealed that soap was not provided in day schools at all because the students were day scholars, although when in school, boarders and day scholars experience same circumstances. The researcher observed that failure to provide soap especially for girls in day schools could be an omission on the part of school administration and could be interfering with the girls' regular learning as they need it more than the boys.

The principals confirmed the girl respondents' assertion that buckets/basins were not sufficient for girls use in their school. They indicated that they shared among themselves. When used in turns the indication is that time could be wasted in non-learning activities

leading to negative effect on girls' regular learning. Other principals reported that the basins and buckets were provided specifically for hand washing and school manual work. This was construed to imply that little attention was paid to the girls' special needs. Other principals indicated that bathrooms should be provided for boarders, of all the girls' needs. Such assumptions make the learning environment un-conducive more so for the girls. The researcher observed that this could compromise girls comfort while at school. These could hinder their concentration in class and could make them seek the facility elsewhere out of school during school time.

## 5. Conclusion

The study showed that the state of sanitation facilities in schools is inappropriate especially for girls learning. Although this would be wished away as generally affecting all school goers, the responses indicated that the state of sanitation facilities affect the girls' learning differently from the boys. The study also indicates that sanitation facilities needs differ in extent, type, quantity and quality according to gender. It can be concluded that the school environment can be experienced differently because of differences in gender. The study showed different aspects of sanitation facilities and how they present learning environment to boys and girls differently. For example, the study showed that girls experienced the water shortage and access differently from the boys. Respondents indicated that sometimes fetching water from the rivers could be used as punishment for deviant behavior in schools. Although both boys and girls could be sent to collect water for their own use or for other uses in school, the boys could harass the girls at water sources, wanting to be the first to fetch and/or requiring the girls to fetch for them. Sometimes such harassment could be experienced from outside community sharing the sources. Besides the girls' need for water being higher for personal use, they were equally required to fetch for other school uses and fetch with difficult compared to boys

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