Journal of Teaching, Learning & Curriculum (JTLC)
Volume 2 Issue 2 Year 2026 Pages 719 – 748
E–ISSN : 3110-3707 | DOI: 10.61227
e-mail : jtlc.journal@gmail.com
https://journal.pusmedia.com/index.php/JTLC/index

Extent of Monitoring Role of School Committee Ensuring Adequacy of Sanitation Facilities in Public Primary Schools in Buchosa District Council, Tanzania

Upendo Mndeme[1]* , Ogoti E.O[2] , Lidya Joseph Mushi[3]

[1,2,3] Masters Student at Mwenge Catholic University, Tanzania

Correspondence e-mail * : Upendomndeme3@gmail.com

Abstract : This study investigated the extent to which monitoring role of school committees ensuring adequacy of sanitation facilities in public primary schools in Buchosa District Council, Tanzania. The study was guided by Systems Theory introduced by Ludwig Von Bertalanffy in 1968. A convergent design was under mixed-methods approach was used. The target population comprised 9,619 individuals, including 102 head teachers, 714 school committee members and 8,803 Standard Seven pupils from 102 public primary schools. A sample of 130 respondents was selected, comprising 10 public primary schools selected through simple random sampling, 40 school committee members selected through stratified random sampling and 10 head teachers together with 80 Standard Seven pupils selected through criterion purposive sampling. Data were collected using questionnaires, interview guides, focus group discussion guides and observation checklists. Instrument validity was established through expert review by two experts in the Department of Educational Planning and Administration at Mwenge Catholic Universitywhile reliability was determined using Cronbach's Alpha, where coefficients were 0.77 for the questionnaire while reliability for observation checklist was determined using KR-20, where its value was 0.952. Quantitative data were analyzed using descriptive statistics as computed in SPSS version 27 including frequencies, percentages and mean scores while qualitative data were analyzed thematically. The findings revealed that the extent of monitoring role of school committees was to a small extent in ensuring the adequacy of sanitation facilities in public primary schools in Buchosa District Council. However, gaps in the availability, maintenance, cleanliness and accessibility of essential sanitation facilities, together with limited financial resources, unreliable water supplies and insufficient follow-up action constrained their adequacy and usability. The study concluded that the existing monitoring practices employed by school committees are insufficient to ensure the adequacy of sanitation facilities in public primary schools in Buchosa District Council. The study recommends that school committees should strengthen regular monitoring of sanitation facilities to ensure the availability of sufficient sanitation facilities in public primary schools in Buchosa District council.

Keyword : School Committees, Monitoring, sanitation facilities, Menstrual hygiene structure.

Article info: Submitted **:** 2026-08-29 | Accepted : 2026-09-12 | Published : 2026-10-28

Copyright © 2026, Authors.

This is an open-access article under the CC BY 4.0

INTRODUCTION

Monitoring sanitation facilities is an important role of school committees because it enables them to assess whether facilities are available, functional, accessible and adequately maintained. School sanitation facilities include toilets, water supply, handwashing facilities and menstrual hygiene structures. The National Guideline for Water, Sanitation and Hygiene for Tanzania Schools emphasizes the importance of maintaining appropriate WASH facilities and establishing systems for their monitoring and maintenance (Ministry of Education, Science and Technology [MoEST], 2016). Similarly, the WHO and UNICEF Joint Monitoring Programme emphasizes that school WASH services should be monitored to assess the availability and functionality of water, sanitation and hygiene services, including facilities that support menstrual health (WHO & UNICEF, 2024). Monitoring therefore provides an important basis for identifying deficiencies and determining whether sanitation facilities continue to meet pupils' needs.

School committees play an important role in monitoring school sanitation facilities by conducting inspections, identifying facility deficiencies, reporting maintenance needs and following up on corrective actions. In Tanzania, the National Guideline for Water, Sanitation and Hygiene for Tanzania Schools assigns school-level stakeholders' responsibilities for monitoring the condition of WASH facilities and identifying needs for improvement and maintenance (MoEST, 2016). Similarly, the School Water, Sanitation and Hygiene Guideline emphasizes community and school-level participation in monitoring, maintaining and improving WASH facilities to promote sustainable service provision (MoEST, 2018). Through these monitoring activities, school committees can identify inadequate toilets, unreliable water sources, non-functional handwashing facilities and inadequate menstrual hygiene structures and communicate such needs to relevant school and education authorities. The extent and consistency of these monitoring activities may therefore influence the adequacy and usability of sanitation facilities in public primary schools.

Monitoring as one the role of school sanitation facilities that involves checking privacy, availability of water, handwashing, sanitary waste-disposal systems and emergency menstrual materials. The National Menstrual Health and Hygiene Guidelines for Tanzania identify adequate water, soap, privacy, disposal facilities and dedicated spaces as important requirements for supporting menstrual health and hygiene in schools (Ministry of Health, 2025). In addition, recent evidence from rural Tanzania shows that the adequacy of sanitation facilities can be assessed through the availability

of separate toilets, privacy, water and soap, safe menstrual waste disposal and emergency absorbent materials (Davis et al., 2025). Regular monitoring of these facilities therefore enables school committees to identify deficiencies, follow up maintenance needs and support actions aimed at ensuring that sanitation facilities remain adequate and usable by pupils.

Globally, empirical evidence demonstrates the importance of regular monitoring in maintaining school sanitation facilities. The WHO and UNICEF Joint Monitoring Programme (2023) reported that schools with established monitoring and maintenance systems are more likely to sustain functional water, sanitation and hygiene services than schools with weak monitoring arrangements. Similarly, Meierhofer et al. (2023) found that continuous monitoring facilitated early identification of problems and timely repair of WASH infrastructure, contributing to the sustainability and usability of sanitation facilities. These findings indicate that regular monitoring is important for identifying deficiencies before they substantially affect the availability and usability of sanitation facilities.

Evidence from Sub-Saharan Africa further demonstrates the relationship between monitoring and sanitation facility conditions. UNICEF (2023) reported that inadequate inspection and weak follow-up mechanisms contributed to non-functional toilets, unreliable water supplies and inadequate menstrual waste-disposal facilities in some schools. In Kenya, Njoroge (2023) found that schools where management committees regularly monitored sanitation facilities reported higher levels of facility functionality and utilization than schools with less frequent monitoring. Similarly, Mugambe et al. (2022) found that continuous supervision of school sanitation facilities contributed to improvements in water availability, toilet cleanliness and privacy for girls. These findings suggest that monitoring is relevant across different sanitation components, including toilets, water, handwashing and menstrual hygiene facilities.

In Tanzania, school sanitation facilities continue to require regular monitoring to ensure that they meet pupils' needs. The Education and Training Policy, 2014 (2023 Edition), and the National Guideline for Water, Sanitation and Hygiene for Tanzania Schools provide a framework for improving school facilities and maintaining a conducive school environment. However, empirical studies indicate continuing challenges in the monitoring and maintenance of sanitation facilities. Ali and Ndunguru (2024) reported that weak monitoring and limited financial resources contributed to delays in maintaining sanitation facilities. Njee et al. (2024) found that although school committees conducted occasional inspections, challenges remained in follow-up and

reliable water supply. Mgaya and Onyango (2022) similarly identified concerns regarding the maintenance and management of sanitation facilities in public primary schools. These findings suggest that the existence of school committees does not necessarily guarantee adequate sanitation facilities; the extent and consistency of their monitoring and follow-up are also important.

The reviewed literature shows that monitoring is an important school committee role in ensuring the adequacy of sanitation facilities. However, most previous studies have examined school WASH generally or have concentrated on individual sanitation components, with limited attention to examining the extent to which school committee monitoring contributes to the overall adequacy of sanitation facilities in public primary schools. In particular, limited empirical evidence exists on how school committee monitoring contributes to the adequacy of the different components of school sanitation facilities, including toilets, water supply, handwashing facilities and menstrual hygiene structures. This gap is important because the extent to which school committees monitor the availability, functionality, accessibility and usability of different sanitation facilities including toilets, water supply, handwashing facilities and menstrual hygiene structures, may influence the overall adequacy of sanitation facilities in public primary schools. This study therefore, investigated the extent to which the monitoring role of school committees ensures the adequacy of sanitation facilities in public primary schools in Buchosa District Council, including toilets, water supply, handwashing facilities and menstrual hygiene structures.

Statement of the Problem

Inadequate sanitation facilities continue to undermine the learning environment in public primary schools in Buchosa District Council, particularly through insufficient toilets, unreliable water supply, poorly maintained handwashing facilities and inadequate menstrual hygiene structures (Silva-Leander (2025). These conditions affect pupils' health, safety, dignity and participation in school activities. Although the Government of Tanzania has established sanitation standards and assigned school committees responsibility for monitoring school sanitation facilities (URT, 2016), challenges remain. In Buchosa District Council, the pupil-to-toilet ratio was 1:68 in 2024, compared with the national standard of 1:25 for boys and 1:20 for girls. Furthermore, only 15 out of 102 public primary schools had functional handwashing stations with soap, while only 7 schools had adequate menstrual hygiene facilities (URT, 2024).

Previous studies have documented challenges related to school WASH facilities in Tanzania.

Mwakabuta et al. (2020) found that inadequate WASH infrastructure affects school health, while Lwambuka and Mwamfupe (2021) identified challenges in implementing School WASH programmes. Chiganga and Nkuba (2022) also reported disparities in access to sanitation facilities, particularly among adolescent girls. However, limited attention has been given to how school committees' monitoring role contributes to ensuring that sanitation facilities meet required standards and remain functional and accessible. Therefore, there is a need for empirical evidence on the extent to which the monitoring role of school committees ensures the adequacy of sanitation facilities in public primary schools in Buchosa District Council, Tanzania.

Research Question

The study will be guided by the following research question:

To what extent does the monitoring role of school committee ensuring adequacy of sanitation facilities in public primary schools in Buchosa District Council, Tanzania?

Significance of the Study

The findings of the study would provide useful insights to stakeholders, including school committees, head teachers, education administrators and local government authorities on the extent to which school committee monitoring contributes to the adequacy of sanitation facilities in public primary schools. Effective monitoring would support the provision and maintenance of appropriate toilets, water, handwashing and menstrual hygiene facilities, thereby contributing to a safe, hygienic and supportive school environment for pupils. Adequate sanitation facilities may help reduce sanitation-related absenteeism, improve pupils' comfort, privacy and dignity, and promote their participation in classroom and school activities. The study would contribute to the body of knowledge by providing empirical evidence on the extent to which school committee monitoring contributes to the adequacy of sanitation facilities in public primary schools, particularly in Buchosa District Council. The findings would enhance understanding of how effective monitoring and follow-up of sanitation facilities can contribute to a school environment that supports pupils' attendance, classroom participation and engagement in learning, and may help address factors associated with poor academic performance.

The findings would inform policy and educational practice by providing evidence for strengthening school-level monitoring, accountability, resource mobilization and follow-up of sanitation facilities. The findings would be relevant to the implementation of the Education and Training Policy, 2014 (2023 Edition), particularly in supporting the provision of adequate school facilities that create a conducive learning

environment and reduce sanitation-related barriers to pupils' attendance and participation in education. The study also informed Systems Theory by demonstrating how school committees, head teachers, pupils, parents, communities and education authorities operate as interconnected components in monitoring and maintaining sanitation facilities. The coordination, resource mobilization, monitoring and feedback among these components influence the adequacy of sanitation facilities and consequently, the school environment experienced by pupils with potential implications for attendance, classroom participation and learning outcomes.

Theoretical Framework

This study was guided by Systems Theory introduced by Ludwig Von Bertalanffy in 1968. The theory provides a comprehensive framework for understanding how different components within a system interact to achieve a common goal. Systems Theory views schools as open systems composed of interconnected elements including school committees, head teachers, pupils, parents, communities and government authorities which work together to create a safe and supportive learning environment. School committees represent an important subsystem responsible for monitoring sanitation facilities ensuring that facilities remain available, functional and effectively utilized by pupils in school. The theory emphasizes that effective coordination, communication and feedback among different stakeholders are necessary for improving and sustaining sanitation facilities in public primary schools.

The strength of Systems Theory lies in its ability to provide a broader understanding of school sanitation by viewing sanitation facilities as an interconnected system involving school committees, pupils, parents, communities and local government authorities (Von Bertalanffy, 1968).It recognizes that the adequacy of sanitation facilities cannot be achieved by one stakeholder alone but depend on the coordinated efforts of school committees, school management, communities and education authorities. In the context of this study the theory therefore helps explain how planning, monitoring, resource provision, maintenance and decision-making by different stakeholders influence one another in Buchosa District. This makes Systems Theory useful for understanding how effective interaction and coordination among stakeholders can contribute to better sanitation facilities and a more supportive school environment.

Moreover, Systems Theory emphasizes the importance of feedback mechanisms in ensuring that a system responds effectively to identified needs and challenges (Von Bertalanffy in 1968). In the context of the current study, this strength enables school committees to identify deficiencies, report problems and communicate

sanitation needs to school management and local authorities. Such feedback supports timely corrective actions, maintenance and allocation of resources to address identified gaps. Therefore, effective feedback strengthens the monitoring process by ensuring that information collected through monitoring is acted upon to improve the adequacy, functionality and accessibility of sanitation facilities in public primary schools.

Review of Empirical Studies

This section reviews empirical studies on the monitoring role of school committees in ensuring the adequacy of sanitation facilities in public primary schools. It focuses on how school committees monitor the availability, functionality, maintenance and accessibility of toilets, water supply, handwashing facilities and menstrual hygiene structures. The review identifies findings, challenges and gaps in previous studies to provide a basis for examining the extent to which school committees' monitoring role ensures adequate sanitation facilities in public primary schools in Buchosa District Council, Tanzania.

Rodriguez and Muller (2022) investigated the effectiveness of community-based monitoring in improving school sanitation standards in rural Spain. Using a mixed-methods design, the study selected 38 primary schools through stratified random sampling and collected data using observation checklists, structured questionnaires and semi-structured interviews. The findings showed that regular monitoring by community committees improved sanitation cleanliness, adherence to WASH standards and the timeliness of maintenance and repairs. However, the study focused broadly on school sanitation with inadequate information specifically examine menstrual hygiene structures, their adequacy, or their usability. In addition, its focus on rural schools in Spain where sanitation conditions and institutional arrangements differ from Tanzania. Therefore, the current study addresses this gap by examining the extent to which monitoring role by school committees enhances their adequacy and usability of sanitation facilities in both rural and urban public primary schools in Buchosa District Council, Tanzania.

Rahman and Singh (2023) investigated the role of School Management Committees in maintaining sanitation facilities in public schools in Northern India. The study adopted a case study design and purposively selected 212 committee members from schools with established monitoring practices. Data were collected using questionnaires, sanitation facility assessment forms and periodic observation schedules. The findings showed that committee-led inspections contributed to consistent facility maintenance, timely repairs and improved allocation of hygiene resources. The use of

questionnaires in case study design methodological mismatch as questionnaire is quantitative data collection instrument. Moreover, the study focused on sanitation facilities generally rather than specifically on menstrual hygiene structures. Therefore, the current study addresses these gaps by adopting a mixed-methods approach, using questionnaires, observation check list, focus group discussion and interview guides to obtain both quantitative and qualitative evidence on the extent to which school committee monitoring enhances the adequacy of usability of sanitation facilities in public primary schools in Buchosa District Council.

Owusu and Danso (2022) conducted a case study on the influence of school committees in managing WASH facilities in basic schools in Ghana. Using a qualitative case study design, the study employed semi-structured interviews, facility inspections and observation checklists to examine how school committees contributed to the sustainability of sanitation facilities. The findings showed that schools with active committee monitoring experienced fewer sanitation breakdowns and more consistent functionality of toilets and handwashing facilities, highlighting the importance of committee participation in sanitation management in low-resource settings. The study provides useful insights for identifying relevant variables and indicators for the current study. However, its qualitative case study design limits the generalizability of the findings, while the inclusion of structured observation checklists alongside qualitative interviews raises a methodological concern about the alignment between the research design and data collection approaches. Furthermore, the study focused broadly on WASH facilities rather than specifically on menstrual hygiene structures. Therefore, the current study addresses these gaps by to examine the extent to which school committee monitoring enhances the adequacy of usability of sanitation facilities in public primary schools in Buchosa District Council. The study also employed a convergent mixed-methods design, allowing quantitative and qualitative data to be collected and integrated to broaden understanding.

Kiprotich and Cherono (2024) investigated the role of parents and school committees in maintaining WASH standards in Kenyan public primary schools. The study employed a cross-sectional survey design and selected 165 committee members and teachers through simple random sampling. Data were collected using questionnaires, sanitation inspection forms and structured observation schedules. The findings revealed that routine monitoring facilitated timely repairs, strengthened hygiene compliance and supported availability of sanitation materials, demonstrating the contribution of school committee oversight to sanitation adequacy. The former study relied mainly on

quantitative data, which limits development of deeper qualitative insights of how committees conduct monitoring and make decisions regarding sanitation facilities. Furthermore, the study addressed WASH standards broadly rather than focusing specifically on sanitation facilities. The study integrated questionnaires, observation checklist, focus group discussion and interviews to obtain both measurable and experience-based evidence on the monitoring practices employed by school committees and their contribution.

Mabula and Nkata (2023) investigated school committee involvement in maintaining sanitation facilities in public primary schools in Mwanza Region. The study employed a descriptive research design and selected 148 committee members through cluster sampling. Data were collected using questionnaires, observation checklists and school sanitation maintenance records. The findings revealed that although committees were involved in sanitation management, their engagement was often reactive rather than based on regular and proactive monitoring. The study provides useful insights into the need to strengthen school-level oversight and promote preventive monitoring practices. The previous study provided sufficient information examine how routine committee monitoring influences the adequacy of usability of sanitation facilities. Moreover, it focused on sanitation facilities generally rather than specifically on menstrual hygiene structures and did not capture pupils' experiences of these facilities. Therefore, the present study addresses these gaps by employing a mixed-methods approach in rural and urban public primary Therefore, the current study addresses these gaps by investigating the extent to which school committee monitoring enhances the adequacy of usability of sanitation facilities in public primary schools in Buchosa District Council. The study including focus group discussions with pupils to obtain their perspectives on how school committee monitoring influences the adequacy of sanitation facilities.

In general, the reviewed literature reveals several methodological, contextual, and knowledge gaps. Methodologically, the reviewed studies employ diverse approaches, including mixed-methods, case study, cross-sectional survey and descriptive designs, but few clearly integrate quantitative and qualitative evidence to establish both the extent and contextual explanations of school committees' monitoring role on sanitation facilities (Rodriguez & Muller, 2022; Rahman & Singh, 2023; Owusu & Danso, 2022; Kiprotich & Cherono, 2024; Mabula & Nkata, 2023). Contextually, most of the available evidence is drawn from Spain, India, Ghana, and Kenya, where educational and sanitation conditions differ from

those in Tanzania, making it necessary to conduct a similar study in Tanzanian public primary schools. Although Mabula and Nkata (2023) provide evidence from Mwanza Region, their study focused on general WASH rather than sanitation facilities. From a knowledge-gap perspective, existing studies examine committee involvement in sanitation management, facility maintenance, WASH standards and general monitoring separately. However, these findings remain fragmented and do not sufficiently explain the extent to which monitoring by school committees contributes to the adequacy of sanitation facilities. Therefore, the current study employed a convergent mixed-methods approach to investigate the extent to which monitoring role by school committees enhances their adequacy of sanitation facilities in rural and urban public primary schools in Buchosa District Council, Tanzania.

METHODOLOGY

This study employed a convergent mixed-methods research design to examine the extent to which monitoring role employed by the school committee in enhancing adequacy of sanitation facilities in public primary schools in Buchosa District Council, Tanzania. The convergent design enabled the researcher to collect quantitative and qualitative data concurrently and analyze the two forms of data separately (Creswell & Plano Clark, 2018; Creswell & Creswell, 2023). Convergence occurred during the interpretation stage, where the quantitative findings from questionnaires and observation checklists were integrated with qualitative findings from interviews and focus group discussions to compare, corroborate and explain participants' experiences regarding the roles of school committees in ensuring the adequacy of sanitation facilities. This integration provided a more comprehensive understanding of the research problem.

The target population comprised 9,619 individuals from 102 public primary schools, including 102 head teachers, 714 school committee members and 8,803 Standard Seven pupils (URT, 2023). A sample of 130 respondents was selected using both probability and non-probability sampling techniques. Simple random sampling was used to select 10 public primary schools, criterion purposive sampling was applied in selecting 10 head teachers and 80 pupils, while stratified random sampling was used for selecting 40 school committee members to ensure adequate representation of different groups.

Data were collected through questionnaires, interview guides, observation checklist and focus group discussion. Questionnaires were administered to school committee members using five-point Likert scale items focusing on monitoring role

while interview guides were used to obtain detailed information from head teachers. Focus group discussion was used for standard seven pupils and observation check list for school environment. The use of multiple instruments enhanced data triangulation, validity and reliability of the findings (Creswell & Plano Clark, 2018).

FINDING AND DISCUSSION

The study aimed to investigate the extent to which monitoring of school committees ensure the adequacy of sanitation facilities in public primary schools in Buchosa District Council, Tanzania. Data were collected using questionnaires administered to school committee members, interviews conducted with head teachers, focus group discussions with Standard Seven pupils and an observation checklist used to assess the sanitation facilities in the sampled schools. The questionnaire data were analyzed using a five-point Likert scale, where 1 = Very Small Extent (VSE), 2 = Small Extent (SE), 3 = Moderate Extent (ME), 4 = Large Extent (LE) and 5 = Very Large Extent (VLE). In the presentation of the findings, F represents the frequency of responses while % represents the corresponding percentage. The interpretation of mean scores followed Gomez and Hashim (2020), whereby mean scores of 1.00–2.69 represents small extent, 2.70–3.49, moderate extent and 3.50–5.00 represent high extent. Furthermore, the interpretation of percentages was adapted from Taherdoost (2019) whereby < 20% represents an extreme minority, 21%–40% a minority, 41%–60% a majority, 61%–80% a high majority and 81%–100% an extreme majority. The detailed distribution of respondents' views regarding the extent of school committees in monitoring role of sanitation facilities is presented in Table 1

Table 1.
School Committee Members Responses on Extent to Which Monitoring Role by School Committees Ensure the Adequacy of Sanitation Facilities in Public Primary Schools

		VSE		SE		ME		LE		VLE		
		f	%	f	%	f	%	f	%	f	%	M
1	The school committee ensures there is clean water in girls changing room	3	8.3	16	44.4	7	19.4	6	16.7	4	11.1	2.25
2	The school committee ensures menstrual management structure are adequate for female pupils	7	19.4	11	30.6	13	36.1	3	8.3	2	5.6	2.78
3	The school committee ensures facilities for menstrual hygiene are private	13	36.1	11	30.6	8	22.2	4	11.1	0	0	2.5
4	The school committee ensures soap is available in girls changing room	9	25.0	6	16.7	11	30.6	8	22.2	2	5.6	2.08
5	The school committee ensures facilities for disposal of menstrual waste are available	10	27.8	9	25.0	17	47.2	0	0	0	0	2.67
6	The school committee ensures emergency sanitary pupils at school	7	19.4	10	27.8	7	19.4	8	22.2	4	11.1	2.19
7	The school committee ensures there is a place for incinerating sanitary pads in schools	5	13.9	11	30.6	12	33.3	6	16.7	2	5.6	2.78
8	The school committee makes sure girls feel comfortable using menstrual management hygiene structural	8	22.2	7	19.4	12	33.3	7	19.4	2	5.6	2.69
9	The school committee monitoring has improved usability of menstrual hygiene facilities	11	30.6	14	38.9	11	30.6	0	0	0	0	2.67
10	The school committee ensures management of menstrual hygiene cleanliness prioritized	13	36.1	10	27.8	6	16.7	5	13.9	2	5.6	2
	Grand mean total											2.46

Source: Field Data (2026).

Key: 1 VSE = Very Small Extent, 2 SE = Small Extent, 3 ME = Moderate Extent, 4 LE = Large Extent, 5 VLE = Very Large Extent, f = Frequency, % Percentage, mean scores of 1.00–2.69 small extent, 2.70–3.49 indicate moderate extent and 3.50–5.00 indicate high extent

Table 1 further shows that school committee members disagreed

that school committees ensured adequate of sanitation facilities in relation to the number of pupils. The data indicate that 58.4% of respondents disagreed with the statement, 16.7% were neutral and 25.0% agreed with the statement. Although the largest proportion of respondents disagreed with the statement, the mean score of 2.58 indicates a small extent according to the adapted interpretation scale. Therefore, the findings indicate that the monitoring role of school committees ensured the adequacy of sanitation facilities such as toilets and handwashing stations in relation to the number of pupils to a small extent.

Equally, data from the observation checklist further confirm that sanitation facilities, particularly toilets and handwashing stations were inadequate in relation to the number of pupils in the observed schools. Specifically, none of the observed schools (0%) had adequate provision of sanitation facilities in relation to the required standards while 100% did not meet the required provision with a mean score of 2.00, indicating inadequate provision. This finding indicates that most pupils had insufficient access to sanitation facilities particularly toilets and handwashing stations particularly during break time, when many pupils needed to use the facilities simultaneously. The inadequate provision imply that monitoring did not sufficiently translate into corrective action to address gaps in the availability of sanitation facilities.

The questionnaire and observation checklist findings indicate that the monitoring role of school committees contributed to ensuring adequate sanitation facilities in relation to the number of pupils to a small extent. Questionnaire respondents disagreed that school committees ensured adequate sanitation facilities including toilets and handwashing stations, in relation to the number of pupils (mean = 2.58), while observation data showed that 100% of the observed schools did not meet the required provision, with a mean score of 2.00. This implies that inadequate implementation of the monitoring role was consistent with the actual conditions observed in schools. Therefore, the findings indicate that school committees had not sufficiently monitored and followed up the provision of sanitation facilities to ensure that toilets and handwashing stations corresponded to the number of pupils.

The responses from the head teacher during face-to-face interviews emphasized this:

> *"The school committee tries to provide hand washing facilities for pupils but achieving the required ratio is challenging because the number of pupils is high compared to the available facilities. The school has limited funds to construct additional hand washing stations and sometimes available resources*

> *are directed to other important school needs. Therefore, some pupils share the available facilities especially during break time*". (Head Teacher, School I, 21 May 2026).

The response from the Head Teacher of School I indicated that the school committee faced challenges in monitoring and addressing the adequacy of sanitation facilities in relation to the number of pupils. The high pupil population, limited financial resources and competing school priorities restricted the provision of additional facilities including handwashing stations and toilets. Consequently, although the committee recognized the need for adequate facilities its monitoring efforts were not sufficiently supported by resources and follow-up actions to address the identified gaps.

Also, focus group discussions confirmed these comments. One pupil explained:

> "*In our school, the hand washing stations are not enough for all pupils. During break time, many pupils need to wash their hands at the same time and sometimes we have to wait for a long time. Some pupils leave without washing their hands because the facilities are few compared with the number of pupils* ". (Pupil, Primary School A, 7 May 2026).

The views expressed by pupils in the FGD at Primary School A indicate that the available sanitation facilities were insufficient for the number of pupils. The situation became more pronounced during break time when many pupils required handwashing facilities simultaneously, resulting in long waiting times and some pupils leaving without using the available facilities. This implies that monitoring alone was insufficient to ensure adequate sanitation facilities when identified gaps in facilities were not followed by adequate resource allocation and corrective action.

The findings indicate that the monitoring role of school committees ensured the adequacy of sanitation facilities in relation to the number of pupils to a small extent. Questionnaire data showed that 58.4% of school committee members disagreed that adequate sanitation facilities were ensured in relation to the pupil population (M = 2.58) while observation data showed that 100% of the observed schools did not meet the required provision (M = 2.00). The Head Teacher of School I attributed this situation to the high number of pupils, limited financial resources and competing school priorities, while pupils in the FGD at School A reported long waiting times because the available handwashing stations were few. This finding is consistent with Abdullahi et al. (2024), who reported monitoring of school WASH facilities in primary schools. From a Systems Theory perspective, the finding demonstrates that pupil population, financial resources, school priorities,

monitoring and sanitation infrastructure, including toilets and handwashing stations are interconnected components influencing the adequacy of sanitation facilities. The findings showed that the monitoring role of school committees ensured the adequacy of sanitation facilities in public primary schools in Buchosa District Council to a small extent. This is due s monitoring efforts were constrained by inadequate resources and limited follow-up action to address gaps in the provision of toilets, handwashing stations and other sanitation facilities.

Data in Table 1 indicate that school committee members show that school committees ensured adequate water for sanitation facilities to a moderate extent (M = 2.92). Specifically, 12 (33.3%) respondents strongly disagreed while 8 (22.2%) disagreed with the statement. Furthermore, 9 (25.0%) respondents were neutral, whereas 4 (11.1%) agreed and 3 (8.3%) strongly agreed that school committees ensured adequate water supply for sanitation facilities. In some schools, efforts were made to provide water for handwashing stations, toilets, menstrual hygiene structure and safe drinking water points. However, ensuring a consistent water supply remained a challenge due to limited water sources, inadequate storage facilities and resource constraints. Consequently, the monitoring role of school committees contributed to ensuring adequate water availability for sanitation facilities to a moderate extent.

The responses from the head teachers during face-to-face interviews further emphasized this situation. One head teacher commented:

> *"The school committee tries to ensure that hand washing stations have water but this is not always possible because the school sometimes experiences water shortages. The available funds are not enough to support regular water provision, especially during periods when the main water source is unavailable. As a result, some hand washing stations remain without water until the supply is restored".* (Head Teacher, School B, 11 May 2026).

The Head Teacher of School B reported that the school committee attempted to maintain water availability for sanitation facilities particularly handwashing stations, but frequent water shortages and inadequate funds limited these efforts. During periods when the main water source was unavailable, some handwashing stations remained without water until the supply was restored. This indicates that inadequate and unreliable water supply constrained the school committee's monitoring efforts to maintain functional sanitation facilities. Similar challenges may affect other sanitation components such as toilets that require water for cleanliness, menstrual hygiene facilities that require water for

personal hygiene and safe drinking water points needed to support pupils' health and wellbeing.

The focus group discussion also supported these views. One pupil explained:

> *"Sometimes we find the hand washing stations without water especially when the school water supply is not available. We want to wash our hands after using the toilets but we cannot do so when there is no water in the bucket. We inform our teachers about the problem but the situation may continue until water becomes available*". (Pupil, School B, 11 May 2026).

Similarly, another pupil explained:

> *"Sometimes the hand washing stations are available but they do not have water or the containers are damaged. When we report these problems, it may take time before they are repaired because the school needs resources to buy new materials. As a result, some pupils fail to wash their hands after using the toilet*". (Pupil, School C, 12 May 2026).

The views of pupils from Primary Schools B and C indicate that the availability and functionality of water are important for the adequacy of sanitation facilities. The pupils' inability to wash their hands when water is unavailable, together with delays in repairing damaged containers, demonstrates that the physical presence of sanitation facilities does not necessarily guarantee their usability. This reflection is relevant to other sanitation facilities including toilets, menstrual hygiene facilities and safe drinking water points, whose adequacy also depends on the availability of essential resources and regular monitoring. Thus, the monitoring role of school committees should not focus only on the existence of sanitation facilities but also on their functionality, water availability, maintenance and usability.

The findings from the quantitative and qualitative data show that school committees ensured adequate water for sanitation facilities to a moderate extent, although water shortages, inadequate funds and delayed repair of damaged facilities limited consistent availability. The findings indicate that inadequate resource mobilization and unreliable water sources contributed to interruptions in the use of sanitation facilities and reduced their functionality. This finding is consistent with Mgaya and Onyango (2022), who found that schools require monitoring so to address shortages and maintain school facilities. From a Systems Theory perspective, the adequacy of sanitation facilities depends on the interaction of interconnected components of the school system. Water supply, financial resources, maintenance and school committee monitoring are interdependent; weakness in one component can affect

the functionality of others. The findings indicate that school committees implemented their monitoring role to a moderate extent. They monitored water availability and the condition of handwashing stations, toilets, menstrual hygiene facilities and safe drinking water. However, water shortages, limited resources and delayed maintenance constrained the consistent adequacy and functionality of these facilities.

Data in Table 1 concerning the extent to which school committees ensure privacy in sanitation facilities for pupils show that 66.7% of respondents rated the item at a small extent, 22.2% at a moderate extent and 11.1% at large extent. Though the largest proportion of respondents rated the item at a small extent, the mean score of 2.50 indicates a small extent according to the adapted interpretation scale. This indicates that the monitoring role of school committees ensured privacy in sanitation facilities to a small extent, suggesting that their monitoring efforts had not adequately ensured private, safe and dignified facilities for pupils. This includes privacy in toilet facilities and menstrual hygiene facilities used by female pupils.

Similarly, data from the observation checklist further confirm that most observed toilet facilities lacked adequate privacy. Specifically, 80% of the observed toilets did not have doors with locks while only 20% had doors and locks, with a mean score of 1.80 indicating a low level of privacy. This finding implies that most pupils lacked adequate privacy and security when using school toilets. The absence of lockable doors may discourage pupils from using the facilities and negatively affect their comfort and proper utilization. Such privacy also affects menstrual hygiene facilities, where female pupils require secure and private spaces to manage menstruation with dignity.

The questionnaire and observation checklist data indicate that privacy in sanitation facilities was generally inadequate. Questionnaire respondents rated school committees' monitoring efforts to ensure privacy at a small extent (mean = 2.50), while observation data showed that 80% of schools did not have lockable toilet doors, with a mean privacy score of 1.80. This shows that the perceived small extent of the monitoring role was consistent with the actual conditions observed in schools. Therefore, the findings indicated that school committees' monitoring efforts had not yet translated into adequate provision of safe, private and dignified sanitation facilities, particularly toilets and facilities used by girls for menstrual hygiene management.

> *"The quantitative data were supported by a face-to-face interview with a head teacher. One head teacher stated: "The delay of funds constrains improving toilets, making it difficult to ensure adequate privacy for pupils".* (Head Teacher, Primary School E, 15 May 2026).

The remark indicates that timely availability of funds is important for maintaining and improving sanitation facilities. Delays in funding can postpone necessary repairs, including replacement of damaged toilet doors and locks, thereby limiting the extent to which monitoring findings are translated into adequate sanitation facilities. Similar resource constraints may also affect the provision and maintenance of private menstrual hygiene facilities, which require secure rooms, functional doors and appropriate facilities to support girls' dignity.

Similarly, views from the focus group discussions with Standard Seven pupils confirmed this. One pupil explained:

> *"Our toilet does not provide enough privacy because the door is damaged and other pupils can easily see us entering or leaving. Sometimes we feel uncomfortable using the toilet when it is in that condition"*. (Pupil, School H, 21 May 2026).

The pupil's views signify that inadequate privacy can discourage pupils from using school toilets, particularly when they feel exposed or uncomfortable. Damaged doors reduce the security and privacy required for proper use of toilets. The same concern is relevant to menstrual hygiene facilities, where female pupils require private and secure spaces for changing sanitary materials and managing menstruation. This indicated that the adequacy of sanitation facilities depends not only on their availability but also on their ability to provide safe, private and dignified conditions for pupils.

The quantitative and qualitative data consistently indicate that the monitoring role of school committees ensured privacy in sanitation facilities to a small extent. This shows that inadequate monitoring, limited financial resources and delayed maintenance reduced the privacy, safety and dignity of pupils when using sanitation facilities, particularly toilets and menstrual hygiene facilities. The findings agree with Mwantimwa and Mpenzi (2025) who found that inadequate privacy and poorly designed sanitation facilities can limit pupils' comfortable and dignified use of school facilities. Interpreted through Systems Theory, privacy in sanitation facilities depends on the interaction of monitoring, resource availability, maintenance and timely follow-up. Weaknesses in these interconnected components affect the overall adequacy, functionality and usability of sanitation facilities. The findings demonstrate that the monitoring role of school committees ensured the adequacy of sanitation facilities to a small extent, particularly in ensuring privacy and dignity in toilet facilities and menstrual hygiene spaces in the sampled public primary schools in Buchosa District Council.

Data in Table 1 regarding the extent to which school committees ensure the functionality of sanitation facilities in public primary schools indicate that 36.1% of respondents rated the item at a small extent, 50.0% at a moderate extent and 13.9% at large extent. The largest proportion of respondents rated the item at a small extent, the mean score of 2.78 indicates a moderate extent according to the adapted interpretation scale. This shows that school committees ensure the functionality of sanitation facilities to a moderate extent. These findings highlights that, although some efforts are made to monitor and maintain sanitation facilities, such efforts not consistently ensure that toilets, handwashing stations, menstrual hygiene structures and water taps remain functional and usable by pupils.

The data from the observation checklist concurred that the functionality of sanitation facilities was inadequate in the majority of the observed schools. Specifically, several facilities were found to be non-functional or inadequately maintained including toilets, handwashing stations, menstrual hygiene structures and water taps. The mean observation score of 1.80 further indicates a low level of functionality across the observed schools. This finding shows that the presence of sanitation facilities did not necessarily mean that they were functional and available for regular use. Non-functional toilets, handwashing stations without water or soap, menstrual hygiene structures lacking essential facilities and damaged or non-functional water taps can limit pupils' access to safe, hygienic and dignified sanitation services.

This figure showed a handwashing station installed near the school toilet block, with tiled flooring and a waste bin nearby, indicating that basic handwashing infrastructure is available. However, no visible water flow, soap or users can be observed, suggesting that the functionality and adequacy of the facility cannot be confirmed from the image alone.

The questionnaire and observation checklist findings indicate that the functionality of sanitation facilities was generally inadequate. Questionnaire respondents rated school committees' efforts to ensure functional sanitation facilities at a moderate extent (mean = 2.78), while observation data showed a low level of actual functionality, with a mean score of 1.80. This suggests that the perceived moderate level of committee efforts was not fully reflected in the actual condition of sanitation facilities observed in the sampled primary schools. Therefore, the findings indicate that school committees' monitoring efforts had not yet translated into consistent functionality of sanitation facilities including toilets, handwashing stations, menstrual hygiene structures and water taps.

These quantitative data were further supported by findings from face-to-face interviews with the Head

Teacher of School D. One head teacher commented:

> *"The school committee recognizes that pupils need functional sanitation facilities including usable toilets, handwashing stations, reliable water taps and menstrual hygiene structures. However, limited financial resources restrict the school's ability to repair and maintain these facilities. Though the committee monitors the situation and discusses possible improvements during meetings, the successful implementation of these plans depends on the availability of funds. Consequently, the school faces difficulties in keeping sanitation facilities functional and ensuring that they fully meet the needs of pupils".* (Head Teacher, Primary School D, 13 May 2026).

The Head Teacher, Primary School D's claim indicates that the school committee recognizes the importance of functional sanitation facilities, but its ability to maintain them is constrained by limited financial resources. The committee contributes by identifying facility problems, mobilizing contributions from parents and community members and communicating resource to education authorities. This indicates that monitoring and discussion alone may not maintain the functionality of sanitation facilities unless they are supported by sufficient resources and timely follow-up action. For example, identifying a damaged water tap, blocked toilet, non-functional handwashing station or inadequate menstrual hygiene structure does not improve its functionality unless the identified problem is repaired or addressed.

Similarly, views from the focus group discussions with Standard Seven girls confirmed,

> *"Our sanitation facilities sometimes have problems, making it difficult for us to use them properly"* (Pupil, School G, 14 May 2026).

The views from the pupil highlight that the availability of sanitation facilities does not necessarily guarantee their functionality. Problems such as damaged toilets, lack of water at handwashing stations, non-functional water taps and inadequate menstrual hygiene structures limit pupils' ability to use sanitation facilities safely, comfortably and consistently. This indicates that regular monitoring needs to be accompanied by timely maintenance and follow-up to ensure that identified sanitation problems are addressed.

The quantitative and qualitative data show that the functionality of sanitation facilities was not consistently ensured by school committees. Limited financial resources, inadequate maintenance and insufficient follow-up contributed to non-functional or poorly maintained facilities including toilets, handwashing stations, menstrual hygiene structures and water taps. This finding is consistent with Keya et al. (2024), who found inadequacies in

access to clean changing spaces and toilets with working locks in some schools in Mwanza. From the perspective of Systems Theory, these findings indicate that the functionality of sanitation facilities depends on the interaction of interconnected components including monitoring, maintenance, resource mobilization, follow-up and stakeholder support where weakness in one component affects the wider sanitation system. Therefore, improved coordination among school committees, communities and education authorities is necessary to strengthen the functionality of sanitation facilities. The findings show that the monitoring role of school committees ensured the adequacy of sanitation facilities to a moderate extent in the sampled public primary schools in Buchosa District Council, Tanzania, although gaps remained in maintaining the functionality of toilets, handwashing stations, menstrual hygiene structures and water taps.

Data in Table 1 indicate that school committee members ensured access to sanitation facilities for pupils with disabilities to a small extent (M = 2.58). Specifically, 11 (30.6%) respondents indicated that this role was performed to a very small extent, while 8 (22.2%) rated it at a small extent. Furthermore, 5 (13.9%) respondents perceived that this role was performed to a moderate extent, whereas 9 (25.0%) believed it was performed to a large extent and only 3 (8.3%) rated it at a very large extent. These responses indicate that most school committee members believed that limited improvements had been made to ensure that sanitation facilities were accessible to pupils with disabilities. Such limitations may affect access to toilets, handwashing stations and menstrual hygiene structures, particularly where facilities lack appropriate designs, sufficient space and suitable access arrangements.

Equally, data from the observation checklist indicate that sanitation facilities were not adequately accessible to pupils with disabilities in most of the observed schools. Specifically, 80% of the observed schools did not have accessible toilets, while only 20% had accessible toilets, with a mean score of 1.80 indicating a low level of accessibility. Regarding handwashing stations, observations indicated that 50% were accessible to pupils with disabilities while 50% were not accessible. In addition, the observation findings showed that 80% of the schools lacked menstrual rooms, while only 20% had menstrual rooms available with a mean availability score of 1.80. These findings imply that pupils with disabilities faced limitations in accessing essential sanitation facilities. Inadequate access to toilets affects their ability to use sanitation facilities independently, while inaccessible handwashing stations hinder proper hand hygiene. Similarly, the absence of designated

menstrual hygiene spaces may limit privacy and comfort for girls who require such facilities.

The questionnaire and observation checklist findings indicate that access to sanitation facilities was inadequate for pupils with disabilities in most of the sampled schools. The questionnaire findings showed that school committees ensured improvements in accessibility to a small extent (M = 2.58), while observations revealed that 80% of the schools lacked accessible toilets and 50% of handwashing stations were inaccessible to pupils with disabilities. Furthermore, 80% of the schools did not have designated menstrual rooms. These findings indicate that school committees had not adequately ensured that toilets, handwashing stations and menstrual hygiene structures were accessible and usable by all pupils including those with disabilities.

The quantitative findings were contradicted with face-to-face interview of head teacher, who had this to share:

> *"The school has toilets designed for pupils with disabilities. Although the school committee has been making efforts to improve the school environment, the available resources have not been sufficient to construct additional disability-friendly toilets. As a result, the school continues to use ordinary toilet facilities that are not accessible to learners with special needs*".(Head Teacher, Primary School J, 25 May 2026).

The Head Teacher of Primary School J's indicates that the school had toilets designed for pupils with disabilities. Although the school committee had made efforts to improve the school environment, inadequate resources limited the construction of additional accessible toilets. This situation may also reflect broader challenges in ensuring accessibility across sanitation facilities, including handwashing stations and menstrual hygiene structures. For example, facilities without suitable access arrangements prevent pupils with disabilities from using them independently and comfortably. This implies that school committees need to strengthen the identification of accessibility barriers, resource mobilization and follow-up on improvements to ensure that sanitation facilities meet the needs of all pupils.

Data from focus group discussions supported the quantitative findings. One group of pupils stated,

> *"The available toilets are not enough and some are in poor condition. We recommend that more toilet cubicles should be constructed and improved so that all pupils, including those with special needs, can use them safely and comfortably"* (Pupil, Primary School E, 19 May 2026).

The statement from pupils at Primary School E indicates that the

limited number and poor condition of toilet facilities create difficulties for pupils with disabilities who need safe and accessible sanitation services. The recommendation to construct additional and improved toilet cubicles highlights the importance of ensuring that sanitation facilities are sufficient, accessible and well maintained. This shows that school committees need to consider the diverse needs of pupils when monitoring the adequacy of sanitation facilities.

The quantitative and qualitative findings indicate that access to sanitation facilities was inadequately ensured for pupils with disabilities. Questionnaire findings showed that school committees ensured improvements in accessibility to a small extent (M = 2.58), while observations confirmed that 80% of the schools lacked accessible toilets (M = 1.80), half of the observed handwashing stations were inaccessible to pupils with disabilities, and 80% of the schools lacked menstrual rooms. Interviews and focus group discussions further revealed that schools lacked disability-friendly toilets and that the available facilities were insufficient or in poor condition. From a Systems Theory perspective, these findings suggest weaknesses in the interaction among school committees, resource mobilization, facility design, maintenance, monitoring and stakeholder support. Inadequate resources and insufficient follow-up can prevent identified accessibility problems from being addressed across the sanitation system. This finding is consistent with Dassah and Bisung (2023), who reported that inadequate and inaccessible WASH facilities created barriers to sanitation access for people with disabilities, particularly where facilities were not designed or maintained to meet their needs. Therefore, stronger coordination among school committees, school management, communities and education authorities are necessary to improve access to toilets, handwashing stations and menstrual hygiene structures. The findings demonstrate that the monitoring role of school committees ensured the adequacy of sanitation facilities to a small extent, particularly in relation to accessibility for pupils with disabilities in the sampled public primary schools in Buchosa District Council, Tanzania.

Table 1 concerning the extent to which school committees ensure the cleanliness of sanitation facilities in public primary schools shows that 47.2 % of respondents rated the item at a small extent, 38.9% at a moderate extent and 13.9 % at a large extent. The mean score of 2.58 indicates a small extent according to the adapted interpretation scale. This indicates that school committees ensured the cleanliness of sanitation facilities to a small extent, imply that their efforts were insufficient to maintain cleanliness consistently throughout the school day. This concern extends beyond toilets to include handwashing stations,

menstrual hygiene structures and water facilities which require regular cleaning and proper maintenance to support hygienic use by pupils.

Equally, data from the observation checklist further confirm that sanitation facilities were not adequately clean in most of the observed schools. Specifically, 80% of the observed schools had toilets that were not clean, while only 20% had clean toilets, with a mean cleanliness score of 1.80, indicating a low level of cleanliness. Regarding handwashing stations, observations showed that only 30% were functional, while 70% were non-functional, indicating challenges in maintaining usable handwashing facilities. For menstrual hygiene structures, 80% of the observed schools did not have designated menstrual rooms, while only 20% had such rooms, with a mean availability score of 1.80. Furthermore, only 20% of the observed schools had water available throughout the day, while only 10% had a reliable water source within the school. These findings highlight challenges in maintaining clean and usable sanitation facilities. Dirty toilets may discourage pupils from using them, unclean or poorly maintained handwashing stations may undermine hand hygiene and inadequate menstrual hygiene structures may limit girls' ability to manage menstruation in a clean and private environment. Unreliable water availability may further constrain cleaning and hygiene practices across these facilities.

The questionnaire and observation checklist findings indicate that the cleanliness and hygienic condition of sanitation facilities were generally inadequate. Questionnaire respondents rated school committees' efforts to ensure cleanliness at a small extent (mean = 2.58), while observation data showed that 80% of schools did not have clean toilets, with a mean cleanliness score of 1.80. The observations also identified challenges relating to the functionality of handwashing stations, the availability of menstrual hygiene structures and the reliability of water supplies. This imply that the limited extent of committee efforts reflected the actual sanitation challenges observed in schools. Therefore, the findings indicate that school committees' monitoring efforts had not yet translated into consistently clean and hygienic sanitation facilities throughout the school day.

These quantitative findings were further supported by face-to-face interviews with the Head Teacher of School G. One head teacher explained:

> *The toilets are cleaned by pupils according to a scheduled cleaning timetable. Only pupils from Standard Five to Standard Seven participate in cleaning and the toilets are cleaned once every morning before classes begin. Although the toilets are generally clean after cleaning, maintaining cleanliness throughout the day becomes difficult because of the large number of pupils using the facilities*

(Head Teacher, Primary School G, 19 May 2026).

The Head Teacher of Primary School G explained that toilets were cleaned according to a scheduled timetable, with pupils from Standard Five to Standard Seven participating in cleaning once every morning before classes began. This indicates that although routine cleaning practices were in place, maintaining toilet cleanliness throughout the day remained difficult because of the large number of pupils using the facilities. Similar challenges may arise in maintaining handwashing stations, menstrual hygiene structures and water points, particularly when cleaning materials and water are insufficient. Therefore, regular cleaning alone may not be sufficient to ensure the cleanliness of sanitation facilities unless cleaning frequency, supervision and available resources correspond to the number of pupils using them.

Similarly, views from focus group discussions with Standard Seven pupils confirmed:

> *Cleaning is done according to a duty roster. For example, today Standard Three and Standard Five are responsible, while tomorrow it will be Standard Four and Standard Six. The toilets are cleaned once a day usually in the morning. However, pupils are afraid to use them because they are clean only in the morning and become dirty during most of the day. Some pupils fear contracting diseases from using the dirty toilets and sometimes they relieve themselves outside the toilets* (Pupil, Primary School F, 21 May 2026).

The views from pupils at Primary School F highlight that although a duty roster was used for toilet cleaning, cleaning was carried out only once a day, usually in the morning. The toilets became dirty during most of the day, causing some pupils to fear contracting diseases and discouraging them from using the facilities. The practice of relieving themselves outside the toilets show that inadequate monitoring may affect pupils' willingness to use the available sanitation facilities. These concerns also demonstrate the importance of maintaining hygienic conditions in other sanitation facilities, including handwashing stations, menstrual hygiene structures and water points. These facilities are not regularly cleaned and maintained, pupils discouraged from using them appropriately, thereby undermining school hygiene practices. This indicated that scheduled cleaning alone may not ensure adequate sanitation unless it is supported by regular monitoring, repeated cleaning when necessary, sufficient cleaning materials, reliable water supplies and timely corrective action.

The quantitative and qualitative findings consistently indicated that school committees ensured the cleanliness of sanitation facilities to a small extent. Although schools had

established cleaning schedules and pupils participated in routine cleaning, heavy use of facilities, limited cleaning resources, unreliable water supplies and insufficient follow-up affected the consistent monitoring of hygienic conditions. These challenges were evident in the cleanliness of toilets and also affect the hygienic use and monitoring of handwashing stations, menstrual hygiene structures and water points. The findings agree with Duijster et al. (2022), who highlighted the importance of effective monitoring interventions in improving the cleanliness and usability of school toilets. Interpreted through Systems Theory, the findings indicate that sanitation cleanliness depends on the interaction of cleaning schedules, availability of water and cleaning materials, pupil participation, supervision and monitoring. Weaknesses in any of these interconnected components affect the overall cleanliness and usability of sanitation facilities. Therefore, stronger coordination among school committees, pupils, communities and education authorities is necessary to improve cleaning practices and sustain hygienic conditions. The findings demonstrate that the monitoring role of school committees ensured the adequacy of sanitation facilities to a small extent, particularly in maintaining the cleanliness of toilets and supporting hygienic conditions in handwashing stations, menstrual hygiene structures and water facilities in the sampled public primary schools in Buchosa District Council, Tanzania.

Generally, the findings revealed that the monitoring role of school committees in ensuring the adequacy of sanitation facilities in public primary schools in Buchosa District Council was implemented to a small extent. The findings indicated that school committees contributed to monitoring the adequacy of toilets and handwashing stations in relation to the number of pupils, water availability, privacy, functionality, cleanliness and accessibility of sanitation facilities for pupils with disabilities. However, gaps in the availability, maintenance, cleanliness and accessibility of essential sanitation facilities, together with limited financial resources, unreliable water supplies and insufficient follow-up action constrained their adequacy and usability. Therefore, strengthening regular monitoring by school committees and providing adequate resources for the construction, maintenance and improvement of sanitation facilities are necessary to enhance their availability, functionality, cleanliness, privacy and accessibility for all pupils.

CONCLUSION

Based on the study findings, the study concluded that the existing monitoring practices employed by school committees are insufficient to ensure the adequacy of sanitation facilities in public primary schools in Buchosa District Council. Even though

school committees made efforts to monitor the adequacy of toilets, handwashing stations, water shortage privacy, cleanliness, functionality and accessibility. These efforts were constrained by inadequate financial resources, unreliable water supplies, insufficient facilities and limited follow-up action. Consequently, the available sanitation facilities did not consistently meet the needs of all pupils, particularly pupils with disabilities. The monitoring role of school committees contributed to ensuring the adequacy of sanitation facilities to a limited extent. Sanitation facilities did not consistently meet the needs of all pupils, particularly pupils with disabilities, due to challenges related to adequacy, functionality, cleanliness, privacy and accessibility.

Recommendations of the study

Based on the conclusion, the study recommends that school committees should strengthen regular monitoring of sanitation facilities to ensure the availability of sufficient sanitation facilities in public primary schools in Buchosa District council. This include the availability of clean, functional, privacy and accessible toilets, handwashing stations, menstrual hygiene structures and water facilities. The study further recommends that the government and other stakeholders should provide the necessary financial and material resources to support the construction, maintenance and improvement of sanitation facilities in public primary schools. Moreover, public primary schools in Buchosa District Council should promote collaboration among school committees, teachers, parents, communities and education authorities to address identified sanitation challenges, improve water availability and ensure that facilities are accessible to all pupils, including pupils with disabilities. These measures would help improve the adequacy and usability of sanitation facilities and promote a safe, healthy and inclusive learning environment for all pupils.

REFERENCES

Ali, R. K., &Ndunguru, E. M. (2024). Assessment of Sanitation Services and Practices among Local Community in West B Municipality in Zanzibar Island, United Republic of Tanzania. *Journal of Applied Sciences and Environmental Management*, 28(9), 2659–2669. https://doi.org/10.4314/jasem.v28i9.8

Chiganga, T., &Nkuba, M. (2022). Gendered disparities in access to school sanitation in Northern Tanzania: A case of adolescent girls in rural schools. *Journal of African Educational Research,* 9(2), 45–59

Cohen, L., Manion, L., & Morrison, K. (2018). Research methods in education (8th ed.). Routledge.

Creswell, J. W., & Creswell, J. D. (2023). Research design: Qualitative, quantitative, and mixed methods approach (6th ed.). Sage Publications.

Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). Sage Publications.

Gomez, R., & Hashim, A. (2020). The level of special education teachers' technological pedagogy and competency level. 8(11), 91–98.

Keya, S. S., Thomas, K., Renju, J., Kapiga, S., Tanton, C., et al. (2024). Unmet menstrual needs and psychosocial well-being among schoolgirls in Northern Tanzania: Baseline results from the PASS MHW study. BMC Women's Health, 24, Article 496. https://doi.org /10.1186/ s12905-024-03357-9

Kiprotich, S., &Cherono, J. (2024). Role of parents and school committees in maintaining WASH standards in Kenyan public primary schools. *East African Journal of Education Studies,* 5(3), 76–91.

Lwambuka, A., & Mwamfupe, D. (2021). Implementation of School Water, Sanitation and Hygiene (SWASH) programmes in public primary schools in Tanzania.

Mabula, C., &Nkata, G. (2023). School committee involvement in maintaining sanitation facilities in public primary schools in Mwanza Region. *Tanzania Journal of Education and Development,* 7(1), 44–61.

Meierhofer, R., Kunwar, B., & Shrestha, A. (2023). Changes in water treatment, hygiene practices, household floors, and child health in times of Covid-19: A longitudinal cross-sectional survey in Surkhet District, Nepal. *International Journal of Hygiene and Environmental Health,* 249, 114138-114138. https://doi.org/10.1016 /j.ijheh.2023.114 138.

Method, A., Hassan, J., Assenga, O., Kamugisha, P., Kawishe, T., Luchagura, F., Msaka, P., Singu, M., & Bintabara, D. (2024). Challenges faced by adolescent girls on menstrual hygiene management: School-based study, Siha, Kilimanjaro, Tanzania. PLOS Global Public Health

Mgaya, H. R., & Onyango, D. O. (2022). Strategies used in Mobilizing Physical Resource in Kilolo District Public Secondary Schools, Tanzania. *East African Journal of Education and Social Sciences, 3(1), 83-88.*

Ministry of Health & UNICEF Tanzania. (2025). National menstrual health and hygiene guidelines. Ministry of Health & UNICEF Tanzania.

Mugambe, R. K., Nuwematsiko, R., Ssekamatte, T., Nkurunziza, A. G., Wagaba, B., Isunju, J. B., Wafula, S. T., Nabaasa, H., Katongole, C. B., Atuyambe, L. M., & Buregyeya, E. (2022). Drivers of solid waste segregation and recycling in Kampala slums, Uganda: A qualitative exploration using the behavior centered design model. *International Journal of Environmental Research and Public Health*

Mwakabuta, S. M., Matata, F. A., &Chacha, L. (2020). WASH infrastructure and school health: The case of rural public primary schools in Tanzania. African Journal of Health and Education, 8(3), 61–74.

Ngilangwa, D. P., Ngalesoni, F., Temu, F., Meremo, A. J., Cooper, D., & Lembani, M. (2025). Menstrual hygiene management practices and associated factors among adolescent school girls in rural Tanzania: A school-based cross-sectional study. Women's Reproductive Health, 12(4), 928–950.

Njee, R., Imeda, C., Ali, S., Mushi, A., Mbata, D., Kapala, A., Makundi, E., Nyigo, V., Majura, A., Akyoo, W., Mbatia, Y., Baraka, G., Msovela, J., Ngadaya, E., Senkoro, M., &Malebo, H. (2024). Menstrual health and hygiene knowledge among post menarche adolescent school girls in urban and rural Tanzania. PLOS ONE, 19. https://doi.org/10.1371/journal. Pone.0284072.

Njoroge, L. (2023). Effectiveness of school committees' fundraising strategies on sanitation facility adequacy in Kenyan public primary schools. Kenya Journal of School Management, 5(1), 91–108.

Nunnally, J. C., & Bernstein, I. H. (1994). Psychometric theory (3rd ed.). McGraw-Hill.

Owusu, K., &Danso, A. (2022). Influence of school committees in managing WASH facilities in Ghanaian basic schools. Journal of Basic Education Research, 8(2), 142–159.

Rahman, S., & Singh, R. (2023). School management committees and sanitation facility maintenance in public schools of Northern India. Asian Journal of School Administration, 6(1), 27–45.

Rodriguez, L., & Muller, A. (2022). Effectiveness of community-based monitoring in improving school sanitation standards in rural Spain. European Journal of Rural Education, 15(2), 75–93.

Sommer, M., Caruso, B. A., Torondel, B., Warren, E. C., Yamakoshi, B., Haver, J., Long, J., Mahon, T., Nalinponguit, E., Okwaro, N., & Phillips-Howard, P. A. (2021). Menstrual hygiene management

in schools: Midway progress update on the "MHM in Ten" 2014–2024 global agenda. Health Research Policy and Systems, 19(1), 1. https://doi.org/10. 1186/s12961-020-00669-8

Stoilova, D., Cai, R., Aguilar-Gomez, S., Batzer, N. H., Nyanza, E. C., & Benshaul-Tolonen, A. (2022). Biological, material and socio-cultural constraints to effective menstrual hygiene management among secondary school students in Tanzania. PLOS Global Public Health, 2(3), e0000110

Taherdoost, H. (2019). What is the best response scale for survey and questionnaire design? Review of different lengths of rating scale. International Journal of Academic Research in Management.

UNESCO. (2021). How water, sanitation and hygiene contribute to girls' education in Tanzania. Retrieved from https://www.unesco.org/en/articles/how-water-sanitation-and-hygiene-contribute-girls-education-tanzaniaUNESCO

UNESCO. (2022). Education and sanitation in East Africa: Monitoring progress and gaps. United Nations Educational, Scientific and Cultural Organization. https://www. unesco. org

UNICEF. (2023). Progress on drinking water, sanitation and hygiene in schools: 2023 update. United Nations Children's Fund. https://www.unicef.org

UNICEF. (2020). Progress on drinking water, sanitation and hygiene in schools: Special focus on COVID-19. United Nations Children's Fund. https://www.unicef.org/reports/progress-on-drinking-water-sanitation-and-hygiene-in-schools-2020

United Republic of Tanzania (URT). (2016), National Guidelines for Water, Sanitation and Hygiene (WASH) in Schools.

United Republic of Tanzania (URT). (2023). National School WASH and Menstrual Hygiene Management Report 2023. Ministry of Health, Community Development, Gender, Elderly and Children & Ministry of Education, Science and Technology, Dodoma, United Republic of Tanzania

Bertalanffy, L. von. (1968). General system theory: Foundations, development, applications. George Braziller.

WHO & UNICEF Joint Monitoring Programme. (2024). Progress on drinking water, sanitation and hygiene in schools 2015–2023: Special focus on menstrual health.

World Health Organization (WHO). (2021). Guidelines on sanitation and health. World Health

Organization. https://www.who.int/publications/i/item/9789241514705

World Health Organization, & UNICEF. (2023). Progress on drinking water, sanitation and hygiene in schools: Special focus on menstrual health. WHO & UNICEF Joint Monitoring Programme.

World Health Organization, & UNICEF. (2024). Progress on drinking water, sanitation and hygiene in schools 2015–2023: Special focus on menstrual health. WHO & UNICEF Joint Monitoring Programme.

AUTHOR CONTRIBUTIONS

Conceptualization : All Authors;
Methodology : All Authors ;
Investigation : All Authors ;
Writing original draft preparation : All Authors ;
Writing review and editing : All Authors ;
Visualization: All Authors.
All authors have read and agreed to the published version of the manuscript