

BUILDING HEALTHIER LEARNING ENVIRONMENT: THE CASE OF SCHOOLS SANITATION IN SOKOTO STATE, NIGERIA

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Abstract

The write-up looks at the place of schools sanitation and hygiene in Sokoto State. The facilities range from water supply, food hygiene, sewage, excreta, healthy classrooms and clean surrounding physical learning environment. The paper observes that factors responsible for poor sanitation and hygiene in schools in Sokoto state include inadequate trained teachers who should educate pupils on health and environmental education. The article further discusses the teachers and learning environments in schools in Sokoto state, the reasons for poor sanitation and hygiene as well as the way formed. In conclusions the paper makes some suggestions for better sanitation and hygiene in the schools which include provision of clean and adequate latrines, supply of safe water, provision of waste disposal facilities, provision of adequate trained teachers for hygiene education and enlightenment of pupils and teachers on the need for cleanliness at all times.

Keywords:

Healthy, Sokoto, Food hygiene, Schools, Environment.

INTRODUCTION

The first step towards healthy and physical learning environment is provision of safe water and sanitation facilities. According to the World Health Organization (WHO) report of 1994, more than one-third ($\frac{1}{3}$) of the world's population lacks a safe water supply. WHO further maintains that by this year (2005), more than ($\frac{2}{3}$) of the world population will face serious shortage of clean water (Terrones-Gurrola et al.,2025). According to UNDP report in (2003) publication, over 50% of the population in Sokoto state lacks access to clean drinking water. This confirms the significant challenges in safe water accessibility for the state.

Most affected are the rural dwellers who largely depend on unsafe water sources such as streams, ponds as well as unprotected wells which all lead to a high incidence of water borne disease like diarrhea and typhoid fever (Shoukat et al.,2025). In fact, Sokoto, according to the report, has the lowest level of basic water access in Nigeria (Jack and Jackson,2025). This is confirmed by frequent outbreaks of waterborne disease as a result of consumption of contaminated water .All these happen despite government and donor agency interventions (Jack and Jackson,2025).

Similarly, in the North-west as a whole, approximately, 55.74% of water sources used for consumption are unsafe water. Also, 31.14% of the water sources are categorized as fair (requiring treatment). Again, only 13.11% of the water in North-West can be considered clean and safe for drinking (Setshedi et al.,2024).

Sanitation

Sanitation refers to the business of keeping places clean and healthy, especially keeping buildings free from dirt and disease (Shariff et al.,2024).

Sanitation consists of activities carried out in schools to protect the pupils and staff from negative effect of unsanitary and contaminated school environment. It considers public health by providing adequate waste management facilities; as well as qualitative drinking water, good food and safety handling (Byansi et al.,2025).

Thus, school sanitation and hygiene are combination of many factors brought together to adequately bring about healthy school environment among the populace. These elements include good drinking water, hand washing, excreta disposal facilities in and around the school premises (Byansi et al ., 2025).

However, if the school does not have adequate water supply, pupils and teachers may be forced to use local water sources which may not be safe. This lead to risk for the health of both pupils and teachers. (Lawal et al.,2024).

Sokoto state, on realizing the absence of safe water supply and sanitation facilities in schools and even the state at large, certain steps have been taken as follows:

Measures in Place to Improve Water Safety in Sokoto State:

Many measures have been put in place to tackle safe water problem in Sokoto state which include the following:

- a. Large-scale water supply and boreholes projects in nooks and crannies of the state.
- b. Distribution of motorized boats and life jackets to enhance safety in riverine areas reliant on water supply. The government provided twenty (20) motorized boats and one thousand (1,000) life jackets.
- c. Training of boat operators
- d. Accessing and utilizing federal and donor-supported interventions (USAID awarded Ten Million Dollars (\$10m) to UNICEF to support water, sanitation and hygiene (WASH) improvements in Sokoto State. (Lawal et al.,2024)

All the measures above are being taken by the Sokoto state government in order to bring an end to students trekking for several matters to get water, students waiting for long period for water tankers to bring water, terrible sources of quality water as well as out of use pipe borne water.

Empirical Review

Sanitation and Hygiene in Schools:

Many researches have shown that there is the problem of provision of safe water in most cities in the country including Sokoto (Wali et al.,2025). Same scenario obtains in other developing nations.

Clarke, et al (1995) conducted a research in Togoto assess the condition of the sanitation facilities and hygiene in schools. According to them only about 30% of the primary and secondary schools had pit latrines and that open field defecation was practiced. Similarly, few schools had access to drinking water whose sources included spring, well, hand pump and pipe borne (Byansi et al.,2025).

However, in many schools, waste disposal facilities were lacking. Similarly, an assessment of the condition or status of sanitation was carried out in Bangladesh were the findings revealed that their cases were worse than that of Togo (Johnson et al.,2015). In the case of our study area schools and hygiene is pathetic. It goes beyond the schools. There is speculation that over 65% of the schools in Sokoto face serious sanitation and hygiene problems (Ogaji,2024).

Current Situation of Sanitation in Sokoto State

On the excreta disposal facilities, three types of excreta disposal system are recommended for schools: pit latrines, ventilated improved pit latrines (VIPs) and pour-flush latrines. There are various disposal facilities that can be used but only few re found in schools that are in bad sate, thereby encouraging indiscriminate defecation in and around the schools premises. There is also the habit of not using latrines on the part of the students. This is attributable to the deplorable condition of the latrines and ignorance on the part of the students and selection of sites for school latrines is not carefully done. Some of the facilities are located far away from the school, this has encouraged misuse.

Infact, some of the schools in the state do not have latrines for students, only for the members of staff. Although, some of the few latrines available are cleaned occasionally, it is only water that is being used and no chemicals or disinfectants. If water is needed for flushing or anal cleansing, the water point should be located close to the latrine, which is obviously absent in our schools. If the water point is located far

from the latrines, it is likely the latrines will not be sufficiently flushed, that blockages can occur and that they can no longer be used.

Stagnant water due to poor drainage, blocked sewages, and overflowing septic tanks or soak away may create adverse health effect (Burger, et al 1994). It is important to distinguish between sullage and sewage. Sullage refers to waste water from the kitchen, shower, etc. sewage is water mixed with excreta or water, which has been in contact with excreta.

The drainage systems in the schools here is a reflection of what obtains in the state generally. There are apparently very poor drainage systems in the schools in Sokoto state. Most water from kitchens is left to flow or stay stagnant in the premises. In some of our schools, students can be seen putting the waters from kitchen to uses such as watering of flowers. More pathetic is when students use such waters for washing hands and feet before taking their bath.

Poor garbage disposal may lead to stagnant water due to blocked drains, to fly breeding and to the attraction of vermin. These situations can contribute to the transmission of diseases. Garbage therefore needs to be dealt with in a safe way. The selection of a garbage disposal system is basically determined by the type and amount of waste being produced.

In Sokoto, issue of garbage disposal remains a serious challenge. This is done in schools indiscriminately. Except for few schools. Perhaps several schools in the state lack specific garbage disposal sites. Heaps of refuse are found in front of classrooms, by offices and around the schools premises. These heaps are later burnt, exposing the pupils and the environment to greater risks. There is apparently absence of effective means of sewage and solid waste disposal in our schools. Food hygiene is a process of observing all necessary conditions and measures towards ensuring safety and suitable food at all stages of food chain e.g registration of food handlers and producers before operation.

Accounting for the Current Situation in Sokoto State:

There are many factors responsible for the current situation in Sokoto state some of the reasons often mentioned to explain the deplorable situation with regard to school situation and hygiene (SSH) in the state is the inadequate trained teachers. Most school teachers lack sanitation and hygiene knowledge and skills. It was observed that school teachers assigned the responsibilities of sanitation and hygiene lack training and are equally nonchalant and or have too much work to do.

Additionally, health or hygiene education is not a separate examination subject and is at the same time insufficiently addressed through other subjects. There is also inadequate supervision and monitoring of students' attitudes towards sanitation and hygiene (SSH) in schools.

Furthermore, the activities of vendors of different items have negatively affected the sanitary condition of most schools. Most of the items sold, are packaged in disposal containers, which are thrown away indiscriminately by the pupils. The absence of water at various points in the schools for washing hands has added to the school could be peer influence, lack of proper home training, ignorance and even wickedness.

Also, and equally very important is the failure on the part of government or relevant authorities to adequately address these issues. It is clear that somewhere somehow: somebody is not doing his work. Is either government is not aware because there are missing links in the communication, or giving SSH its needed attention.

Strategies for Improving the Current Situation in Schools:

To begin with, the school staff has to know the basics as regard SSH, and the local conditions and preferences related to the design and use of facilities. They should be able to do something to improve the situation themselves, for instance by installing a drum as a reservoir, inspect students even during lectures on their habits and possibly outside the school environment.

Again, the schools should have Health Committees to ensure supervision of sanitation in schools, there should be adequate supervision of the activities of school vendors, and student's habits in eating, drinking, dressing and personal hygiene at regular intervals.

Additionally, it is not advisable to burn garbage, in view of health hazard such as respiratory diseases. In some schools, solid garbage disposal may be more complex because they have a wider variety of materials that need to be disposed of. Therefore plastic and tin waste, for instance, will have to be dealt with separately. These can either be collected for recycling or disposed through a municipal collection system. Waste bins should be placed in every classroom and round the school compound to facilitate collection before treatment.

Finally, a run through the DO'S and DON'TS for improving students hygiene in schools should include; provision of good drinking water (presence of a tap, pump or tank) and sanitation facilities; proper refuse disposal sites; provision of hand washing facilities; development and implementation of health education programmes at schools; provision of well-maintained latrines; establishment of a system to control the quality of the food sold to the students; and possibly the development of a health education programme. For a positive change on the current sanitation, there should be presence of enough latrines; cleanliness of the latrines and presence of cleaning materials; drainage of waste water and garbage disposal must be taken serious; latrines and other facilities must be accessible to the entire school population.

Conclusion and Suggestions: Toward Better Sanitation and Hygiene

The article maintains that there should be continuous review of the present situation in terms of practical issues regarding schools sanitation and hygiene. The institutions must collaborate among themselves to share the experiences gained in handling the situation of poor sanitation and hygiene.

Suggestions: In order to tackle the Problems of Poor Sanitation and Hygiene in Schools in Sokoto, the following suggestions are made:

- i. Provision of adequate latrines and garbage disposal facilities to ensure regular cleanliness and maintenance.
- ii. Constriction of trenches for biodegradable waste collected to produce organic fertilizers and ensure regular disposal of bins by pupils at designated areas.

- iii.** Promotion of wealth through collection of materials such as used plastics, cans, papers for recycling. etc
- iv.** Provision of adequate water sources in schools such as taps, pumps, or tanks to ensure drinking safe water.
- v.** Incorporation of Hygiene education in the school curriculum to educate pupils on sanitation and personal hygiene.
- vi.** Promotion of safe drinking, handling, and storage of water through hygienic ways.
- vii.** Encourage children to wash hands after using the toilet.
- viii.** Encourage children to wash hands before and after eating.

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