



Research Article

An Analytical Study of Sanitation Challenges in Government Schools and the Role of Stakeholders in Ensuring Sustainable Hygiene Management

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Abstract

The present study examined sanitation-related challenges in selected government schools of Karauli district, Rajasthan, and analysed the role of stakeholders in ensuring sustainable hygiene management. The study focused on identifying existing sanitation conditions, major sanitation-related issues, and the contribution of school heads, teachers, students, parents, and community members toward sanitation improvement. The descriptive survey method was adopted for conducting the study. A self-developed questionnaire based on a three-point scale was used for data collection. The sample consisted of 105 respondents, including 15 school heads, 30 teachers, 30 students, and 30 parents selected purposively from fifteen government schools. Percentage analysis was used for the interpretation of data. The findings revealed that overall sanitation conditions in the selected schools were generally satisfactory. Positive responses were observed regarding classroom cleanliness, drinking water facilities, and sanitation awareness among students. However, challenges such as a shortage of sanitation staff, inadequate maintenance of toilets, a lack of dedicated sanitation budgets, and limited parental participation were identified in some schools. The study further revealed that active leadership by school heads, teacher participation, and student involvement significantly contributed to sanitation improvement. Sustainable sanitation management requires coordinated participation from all stakeholders. The study provides educational, practical, and policy-oriented suggestions for strengthening sanitation systems and promoting healthy school environments in government schools.

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KEYWORDS: School Sanitation, Hygiene Management, Government Schools, Stakeholders, Educational Environment, Sanitation Challenges.

1. INTRODUCTION

In school, sanitation is an essential component of a healthy educational environment. Educational institutions are not only centres of academic learning but also spaces for the physical, emotional, and social development of students. A clean and hygienic environment positively influences students' attendance, concentration, discipline, and academic performance [1]. Poor sanitation conditions may adversely affect students' health and learning outcomes.

Government initiatives such as the Swachh Bharat Mission and School Health Programmes have emphasised sanitation improvement in schools [2]. These initiatives aim to provide clean drinking water, proper toilet facilities, handwashing systems, and hygiene awareness among students. Despite these efforts, several government schools still face sanitation-related problems such as insufficient maintenance of toilets, shortage of sanitation workers, inadequate waste management systems, and lack of awareness among students and parents [3].

Previous studies have highlighted the relationship between school sanitation and educational quality [4]. A hygienic school environment contributes to better health and improved learning outcomes among students. Researchers have also emphasised that sanitation management is not solely dependent on infrastructure but also on stakeholder participation [5].

The effectiveness of sanitation programmes depends upon coordinated efforts from school heads, teachers, students, parents, and local communities. Therefore, the present study was undertaken to analyse sanitation challenges in government schools and examine the role of stakeholders in ensuring sustainable hygiene management.

2. MATERIALS AND METHODS

The descriptive survey method was employed in the present study because it is suitable for investigating existing conditions, practices, and attitudes objectively.

2.1 Study Area

The study was conducted in selected government schools of Karauli district, Rajasthan, India.

2.2 Sample

Fifteen government schools were selected through a purposive sampling technique to ensure representation of diverse sanitation conditions and school categories.

2.3 Respondents

| Respondent Category | Count |
|--------------------------|------------|
| School Heads | 15 |
| Teachers | 30 |
| Students | 30 |
| Parents | 30 |
| Total Respondents | 105 |

2.4 Research Tool

A self-developed questionnaire was used for data collection. Separate questionnaires were prepared for school heads, teachers, students, and parents. Each questionnaire contained ten statements related to sanitation facilities, hygiene awareness, stakeholder participation, and sanitation management.

2.5 Data Collection Procedure

Researchers personally visited the selected schools and distributed questionnaires among respondents. Proper instructions were provided before collecting responses. Incomplete questionnaires were excluded from analysis. Questionnaires were prepared manually according to research objectives and previous sanitation studies. Data tabulation and percentage calculations were performed using spreadsheet software. Field observations were also conducted during school visits.

2.6 Scale Used

| Response | Score |
|----------|-------|
| Agree | 5 |
| Neutral | 3 |
| Disagree | 2 |

2.7 Statistical Technique

The percentage analysis method was used for the interpretation and presentation of data.

3. Research Questions

1. What is the present sanitation status in selected government schools?
2. What are the major sanitation-related challenges faced by schools?
3. What role do school heads, teachers, students, and parents play in sanitation management?
4. How can stakeholder participation improve sustainable hygiene management in schools?

4. RESULTS

The analysis of responses obtained from school heads indicated that the sanitation conditions in most government schools were generally satisfactory and showed noticeable improvement over recent years. A majority of respondents expressed positive opinions regarding the overall cleanliness of school premises, maintenance of classrooms, and availability of safe drinking water facilities for students. School heads also acknowledged that regular sanitation awareness activities, cleanliness drives, and hygiene-related campaigns had contributed significantly to improving students' habits and awareness regarding personal and environmental hygiene.

Furthermore, many respondents agreed that teachers, parents, and school management committees played an important role in maintaining sanitation standards within the schools. The findings also revealed that the availability of functional toilets and proper waste disposal systems had improved in several schools, although some institutions still faced challenges related

to maintenance and resource availability. Overall, the responses reflected a positive perception toward sanitation management practices and highlighted the growing awareness among stakeholders regarding the importance of hygiene and cleanliness in creating a healthy educational environment.

5. DISCUSSION

The findings of the present study support previous research emphasising the relationship between sanitation and educational quality. A clean school environment positively affects students' attendance, health, discipline, and academic performance. The study also highlights that sanitation management is a collective responsibility requiring coordinated participation from all stakeholders. Positive responses from school heads and teachers indicate growing awareness regarding sanitation management. Students' active participation reflects the effectiveness of sanitation awareness programmes conducted in schools.

However, sanitation-related challenges such as a shortage of sanitation workers, inadequate maintenance systems, and limited community participation indicate the need for stronger policy implementation and better resource allocation. Similar findings have been reported in earlier studies where infrastructure alone was considered insufficient without stakeholder participation.

Therefore, sanitation education should be integrated into school culture, classroom practices, and community engagement for sustainable improvement.

6. CONCLUSION

The present study concludes that sanitation conditions in selected government schools of Karauli district are generally satisfactory, although several challenges continue to affect effective sanitation management. The study clearly indicates that sanitation improvement cannot be achieved solely through infrastructure development or government programmes. Active participation and coordination among school heads, teachers, students, parents, and local communities are essential for sustainable sanitation management.

The research further highlights that educational institutions play a significant role in developing hygienic attitudes and responsible behaviour among students. Positive sanitation practices adopted at the school level may also influence families and society. Nevertheless, issues such as a shortage of sanitation staff, a lack of dedicated sanitation budgets, and limited parental participation require immediate attention.

The study emphasises continuous monitoring, awareness programmes, stakeholder coordination, and policy-level support to strengthen sanitation systems in government schools. Future studies may explore the relationship between school sanitation

and academic achievement, student health, and community participation.

7. Acknowledgements

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Author Contributions

Suresh Chand Yogi played the principal role in conceptualisation, field investigation, questionnaire preparation, data collection, statistical analysis, interpretation of findings, and manuscript writing.

Ekta Sharma contributed to field support, data collection assistance, and coordination during the research process.

Dr Chandresh Goyal provided academic guidance, research supervision, and technical suggestions throughout the study.

8. Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this research paper.

REFERENCES

1. Government of India. *Swachh Bharat Mission guidelines*. New Delhi: Ministry of Drinking Water and Sanitation, 2021.
2. Ministry of Education. *School health and wellness programme*. New Delhi: Government of India; 2020.
3. National Council of Educational Research and Training (NCERT). *Health and hygiene in school education*. New Delhi: NCERT; 2019.
4. Government of Rajasthan, Education Department. *School sanitation circulars and guidelines*. Jaipur: Government of Rajasthan; 2022.
5. United Nations Children's Fund (UNICEF). *Water, sanitation and hygiene in schools*. New York: UNICEF; 2021.
6. World Health Organisation. *Global standards for health-promoting schools*. Geneva: WHO; 2021.
7. Sharma R, Singh P. School sanitation and student health outcomes. *Indian Journal of Educational Research*. 2020;15(2):45–52.
8. Kumar S, Verma A. Hygiene awareness among school students. *International Journal of Social Science Education*. 2019;8(1):67–74.
9. Gupta M. Role of stakeholders in school sanitation management. *Journal of Educational Administration Studies*. 2021;12(3):90–98.
10. United Nations Educational, Scientific and Cultural Organisation (UNESCO). *Clean schools and learning outcomes report*. Paris: UNESCO; 2020.

Appendix: Research Questionnaires**Questionnaire A — Head of Institution**

School Name: _____ Name: _____

Rating Scale: 5 = Agree / Excellent, 3 = Average, 2 = Disagree

| Questions | Evaluation (2 / 3 / 5) |
|--|------------------------|
| 1. The overall cleanliness arrangement of the school campus is satisfactory. | 2 3 5 □□□ |
| 2. The number of cleaning staff is sufficient. | 2 3 5 □□□ |
| 3. The condition of toilets in the school is satisfactory. | 2 3 5 □□□ |
| 4. Adequate arrangement of safe drinking water is available. | 2 3 5 □□□ |
| 5. Students are actively involved in cleanliness activities. | 2 3 5 □□□ |
| 6. Parents' participation helps in maintaining cleanliness. | 2 3 5 □□□ |
| 7. Adequate support is received from local authorities/government for cleanliness. | 2 3 5 □□□ |
| 8. The waste disposal system in the school is effective. | 2 3 5 □□□ |
| 9. There is a separate budget arrangement for cleanliness activities. | 2 3 5 □□□ |
| 10. The cleanliness system of the school has improved compared to previous years. | 2 3 5 □□□ |

Questionnaire B — Teachers

School Name: _____ Name: _____

Rating Scale: 5 = Agree / Excellent, 3 = Average, 2 = Disagree

| Questions | Evaluation (2 / 3 / 5) |
|--|------------------------|
| 1. Classrooms are always kept clean. | 2 3 5 □□□ |
| 2. Students follow cleanliness-related rules. | 2 3 5 □□□ |
| 3. Toilet and water facilities do not affect teaching-learning. | 2 3 5 □□□ |
| 4. The school administration gives special attention to cleanliness. | 2 3 5 □□□ |
| 5. Cleanliness education is included in co-curricular activities. | 2 3 5 □□□ |
| 6. The work of cleaning staff is satisfactory. | 2 3 5 □□□ |
| 7. Adequate resources are available to maintain cleanliness. | 2 3 5 □□□ |
| 8. Parents and the community also support the school cleanliness system. | 2 3 5 □□□ |
| 9. Students are developing permanent cleanliness habits. | 2 3 5 □□□ |
| 10. The cleanliness arrangement in the school is exemplary. | 2 3 5 □□□ |

Questionnaire C — Students

School Name: _____ Name: _____

Rating Scale: 5 = Agree / Excellent, 3 = Average, 2 = Disagree

| Questions | Evaluation (2 / 3 / 5) |
|---|------------------------|
| 1. Cleaning is done daily in the school. | 2 3 5 □□□ |
| 2. Toilets remain clean and usable. | 2 3 5 □□□ |
| 3. Safe drinking water is easily available. | 2 3 5 □□□ |
| 4. Classrooms remain neat and clean. | 2 3 5 □□□ |
| 5. Sufficient dustbins are available in the school. | 2 3 5 □□□ |
| 6. Teachers explain the importance of cleanliness to us. | 2 3 5 □□□ |
| 7. Cleanliness programs (essay, poster, drama, etc.) are organised regularly. | 2 3 5 □□□ |
| 8. The problem of dirtiness in the school remains minimal. | 2 3 5 □□□ |
| 9. I actively participate in maintaining cleanliness. | 2 3 5 □□□ |
| 10. The cleanliness system of the school is better than that of other places. | 2 3 5 □□□ |

Questionnaire D — Parents

School Name: _____ Name: _____

Rating Scale: 5 = Agree / Excellent, 3 = Average, 2 = Disagree

| Questions | Evaluation (2 / 3 / 5) |
|--|------------------------|
| 1. The overall cleanliness of the school campus is satisfactory. | 2 3 5 □ □ □ |
| 2. Toilet facilities are adequate for children. | 2 3 5 □ □ □ |
| 3. Drinking water facilities are pure and safe. | 2 3 5 □ □ □ |
| 4. The school administration pays attention to cleanliness. | 2 3 5 □ □ □ |
| 5. Children learn good cleanliness habits from school. | 2 3 5 □ □ □ |
| 6. The number and work of cleaning staff are appropriate. | 2 3 5 □ □ □ |
| 7. The waste management system in the school is effective. | 2 3 5 □ □ □ |
| 8. Lack of cleanliness does not negatively affect children's health. | 2 3 5 □ □ □ |
| 9. Parents are involved in cleanliness activities. | 2 3 5 □ □ □ |
| 10. The cleanliness system of the school is better than that of other schools. | 2 3 5 □ □ □ |

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