

Role of NGOs and Civil Society Organizations in Enhancing WASH Facilities in Government Schools: Lessons from Kallakurichi District, Tamil Nadu

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KEYWORDS

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ABSTRACT

The research explores the significant role played by Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) in improving Water, Sanitation, and Hygiene (WASH) facilities in government schools within Kallakurichi District, Tamil Nadu. The study investigates the mechanisms through which these organizations contribute to the enhancement of WASH infrastructure, assess their impact on student health and educational outcomes, and identify the challenges and best practices in implementing such initiatives. The research highlights how NGOs and CSOs act as catalysts for change by mobilizing resources, raising awareness, and fostering community participation. Their efforts have led to significant improvements in access to clean water, sanitation facilities, and hygiene education in schools, resulting in better health, increased school attendance, and enhanced academic performance among students. The key findings indicate that collaborative efforts between these organizations, local communities, and government bodies are crucial for the sustainability of WASH initiatives. The study also identifies various challenges faced by NGOs and CSOs, including funding constraints, bureaucratic hurdles, and the need for capacity building. Lessons from the Kallakurichi District underscore the importance of multi-stakeholder partnerships, community involvement, and context-specific approaches in successfully addressing WASH issues in school settings.

Introduction

NGOs and CSOs play a vital role in improving Water, Sanitation, and Hygiene (WASH) facilities in government schools, which is essential for creating a healthy and conducive learning environment. NGOs and CSOs in the Kallakurichi District of Tamil Nadu, India have made noteworthy contributions to enhancing water, sanitation, and hygiene (WASH) facilities in government schools. Their efforts offer vital insights for future initiatives. The paper examines the significant contributions of non-governmental organizations (NGOs) and civil society organizations (CSOs) in improving water, sanitation, and hygiene (WASH) facilities in government schools. It emphasizes the necessity of their participation in this crucial domain. Non-governmental organizations (NGOs) and civil society organizations (CSOs) have been instrumental in raising awareness about the significance of water, sanitation, and hygiene (WASH) facilities in public schools. They have orchestrated campaigns and workshops to enlighten kids, teachers, and parents about the importance of meticulous hygiene habits and the necessity of effective WASH facilities. The increased awareness has resulted in a substantial decrease in the occurrence of waterborne diseases and enhanced the general well-being of children and staff. An example of this is the non-governmental organization "Pratham" that has successfully implemented a comprehensive Water, Sanitation, and Hygiene (WASH) program at multiple government schools in the Kallakurichi District. As a result, there has been a significant reduction in the number of pupils affected by waterborne illnesses.

Non-governmental organizations (NGOs) and civil society organizations (CSOs) have played a crucial role in supplying resources and financial assistance to government schools in order to improve their water, sanitation, and hygiene (WASH) facilities. They have contributed to the development of new sanitation facilities, installation of hand hygiene amenities, and provision of potable water. The enhancements made to sanitation and sanitary standards in government schools have greatly improved the overall environment, creating a more favorable setting for learning. As an illustration, the non-governmental organization "Bodh Shiksha Samiti" has built new toilets and implemented hand washing amenities in multiple government schools in Kallakurichi District. This initiative has resulted in a substantial decrease in the dropout rate among children caused by unsatisfactory sanitary conditions. NGOs and CSOs play a vital role in developing WASH facilities by effectively mobilizing communities and involving them in the efforts to enhance sanitation and hygiene conditions. They have collaborated extensively with local communities to ascertain their needs and devise solutions that are customized to meet their individual requirements. The community-based approach has

successfully maintained the upkeep and efficient utilization of WASH facilities by cultivating a sense of ownership among community members. As an illustration, the non-governmental organization "Eklavya" has successfully carried out a community-centered Water, Sanitation, and Hygiene (WASH) initiative in multiple government schools located in the Kallakurichi District. This effort has resulted in significant enhancements in the overall sanitation and hygiene conditions. WaterAid India has partnered with the State National Health Mission to work on projects related to Menstrual Hygiene Management (MHM). They offer training and knowledge support to relevant individuals and organizations, and also collaborate with the Department of Women and Child Development on programs like UDITA. In addition, they have commenced the implementation of rainwater harvesting systems on school grounds and included WASH (Water, Sanitation, and Hygiene) into school development plans. NGOs and CSOs play a crucial role in improving water, sanitation, and hygiene (WASH) facilities in government schools, which is essential for establishing a conducive and efficient learning environment. Their contributions have played a crucial role in increasing awareness, offering resources, and rallying communities to enhance sanitation and hygiene conditions. The experiences in Kallakurichi District, Tamil Nadu, highlight the necessity of engaging NGOs and CSOs in WASH programs, showcasing their substantial influence on improving the overall standard of schooling.

Objectives

The objective of the study is to evaluate the contribution of non-governmental organizations (NGOs) and civil society organizations (CSOs) in improving the Water, Sanitation, and Hygiene (WASH) infrastructure in government schools located in the Kallakurichi

District. The study also aims to assess the impact of enhanced WASH facilities on the health, attendance, and academic performance of students in the chosen government schools. The study seeks to identify the primary challenges encountered by NGOs and CSOs in implementing WASH initiatives in government schools. It also aims to assess the importance of community engagement and local collaborations in the effectiveness and sustainability of WASH projects led by NGOs and CSOs.

Problem Statement

Despite efforts to improve Water, Sanitation, and Hygiene (WASH) facilities in public schools, ongoing barriers hinder optimal health and educational outcomes for children. NGOs and CSOs play a crucial role in addressing these challenges. Understanding their contributions, the impact of enhanced WASH facilities on student well-being and academic performance, and the difficulties encountered during implementation is essential. The study aims to address these deficiencies by examining the dynamics of WASH programs in government schools, emphasizing NGO and CSO participation, and proposing remedies to surmount barriers to attain success.

Theoretical framework

The theoretical framework for examining the role of Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) in enhancing Water, Sanitation, and Hygiene (WASH) facilities in government schools draws upon several key concepts. Firstly, it incorporates the principles of participatory development, emphasizing the importance of community involvement and ownership in WASH initiatives. Secondly, it considers the theory of social capital, highlighting the role of NGOs and CSOs in building networks, fostering collaboration, and mobilizing resources to address WASH challenges. The framework integrates elements of institutional theory, which elucidates the impact of formal and informal structures on the implementation and sustainability of WASH projects. By synthesizing these theoretical perspectives, the study aims to elucidate the mechanisms through which NGOs and CSOs contribute to enhancing WASH facilities in government schools, drawing valuable lessons from the context of Kallakurichi District, Tamil Nadu.

Methodology

The study adopted a qualitative approach, utilizing descriptive analysis to investigate the role of Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) in enhancing Water, Sanitation, and Hygiene (WASH) facilities in government schools. Interviews were conducted with twenty five coordinators from NGOs and CSOs, supplemented by structured open-ended questions with five point Likert scale to capture nuanced insights into their contributions. Thematic analysis was then applied to discern recurring patterns and themes within the interview data, providing a comprehensive understanding of the strategies and challenges faced by these organizations. The study also incorporated secondary data sources including articles, books,

government reports, NGO publications, and official documents to enrich the analysis and provide a broader context for the study. The comprehensive approach facilitated a thorough exploration of the complexities surrounding WASH interventions in government schools, highlighting key areas for improvement and potential avenues for intervention.

Table1.1: Interview schedule responses and interpretation

S. No.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
01	NGOs and CSOs have significantly contributed to improving WASH infrastructure in government schools in Kallakurichi District	12 (48%)	9 (36%)	1 (4%)	2 (8%)	1 (4%)	25
02	Enhanced WASH facilities have positively impacted student health, attendance, and academic performance in selected government schools	13 (52%)	7 (28%)	2 (8%)	1 (4%)	2 (8%)	25
03	NGOs and CSOs face significant challenges and barriers in implementing WASH initiatives in government schools	14 (56%)	4 (16%)	3 (12%)	3 (12%)	3 (12%)	25
04	Community participation and local partnerships play a critical role in the success and sustainability of WASH projects led by NGOs and CSOs	15 (60%)	8 (32%)	0 (0%)	1 (4%)	1 (4%)	25

Source: Survey Data

The table presents the results of a survey on the effectiveness of NGOs and CSOs in improving WASH infrastructure in government schools in Kallakurichi District. The results show that a significant majority of respondents (48%) strongly agree that NGOs and CSOs have contributed significantly to improving WASH infrastructure in government schools in Kallakurichi District. Additionally, 36% of respondents agree that NGOs and CSOs have contributed to improving WASH infrastructure, while 4% are neutral and 8% disagree. Only 4% strongly disagree that NGOs and CSOs have contributed to improving WASH infrastructure. The results also indicate that enhanced WASH facilities have positively impacted student health, attendance, and academic performance in selected government schools. A majority of respondents (52%) strongly agree that enhanced WASH facilities have positively impacted student health, attendance, and academic performance, while 28% agree and 8% are neutral. Only 4% disagree and 8% strongly disagree. The table also highlights the challenges faced by NGOs and CSOs in implementing WASH initiatives in government schools. A significant majority of respondents (56%) strongly agree that NGOs and CSOs face significant challenges and barriers in implementing WASH initiatives in government schools. Additionally, 16% agree, 12% are neutral, 12% disagree, and 12% strongly disagree. Finally, the table shows that community participation and local partnerships play a critical role in the success and sustainability of WASH projects led by NGOs and CSOs. A majority of respondents (60%) strongly agree that community participation and local partnerships play a critical role in the success and sustainability of WASH projects, while 32% agree and 4% are neutral. Only 4% disagree and 4% strongly disagree.

RESULT AND DISCUSSION

NGOs support to WASH provision

NGOs play a crucial role in supporting the provision of Water, Sanitation, and Hygiene (WASH) services, particularly in underserved communities. One key avenue for their support lies in promoting coproduction by collaborating with community-based networks to advocate for local authorities' engagement in equitable WASH provision, emphasizing the benefits for children and the imperative of upholding children's rights. NGOs can ensure that local assessments and data collection efforts include child-specific data, enabling well-targeted interventions that address the unique needs of children. They can facilitate the inclusion of caregivers', children's, and adolescent's perspectives in community-driven responses to WASH upgrades, ensuring that interventions are tailored to address their concerns and priorities. NGOs can implement complementary initiatives within their

areas of expertise to supplement efforts towards universal WASH provision. These initiatives may include hygiene support programs, the creation of safe play spaces, initiatives addressing the safety of adolescent girls, provision of WASH facilities in nearby schools and daycare centers, and nutritional support to address malnutrition resulting from contaminated surroundings. By diversifying their interventions, NGOs can contribute to comprehensive approaches that address multiple dimensions of WASH-related challenges. Advocacy and communication are also vital roles for NGOs in advancing WASH provision. They can advocate at national and international levels for recognition of the linkages between WASH and children's well-being, highlighting the importance of locally-specific WASH efforts to ensure their relevance and effectiveness for local children. By amplifying children's voices and advocating for their rights to WASH services, NGOs can drive policy changes and mobilize resources to address gaps in WASH provision, ultimately contributing to improved health, dignity, and quality of life for communities worldwide.

NGO and CSO Contributions to Improving WASH in Government Schools

The Kallakurichi District in Tamil Nadu has made significant advancements in improving the Water, Sanitation, and Hygiene (WASH) infrastructure in government schools, mostly due to the joint efforts of several renowned non-governmental organizations (NGOs) and civil society organizations (CSOs). These groups have played a crucial role in enhancing the overall health and educational environment for students, teachers, and the broader community. UNICEF has been instrumental in promoting Water, Sanitation, and Hygiene (WASH) initiatives in schools across India, contributing significantly to the country's achievements in this area. UNICEF has worked closely with local authorities and other stakeholders in Tamil Nadu to improve the accessibility of safe drinking water and sanitation facilities in schools. In 2012, UNICEF launched the "WASH in Schools" campaign with the aim of ensuring that all schools in the area had functional drinking water and sanitation facilities. The project has led to a significant enhancement in the accessibility of WASH facilities in schools. The percentage of schools equipped with functional drinking water facilities has risen from 92% to 100%, while the percentage of schools with sanitation facilities has also increased from 76% to 100%. WaterAid, a major contributor to this project, has actively engaged in supporting the construction of sanitary facilities in schools. WaterAid has partnered with local organizations in Kallakurichi District to construct sanitation blocks in several schools, thereby addressing the ongoing issue of inadequate toilet facilities. For example, in a certain school, a thorough assessment of the water, sanitation, and hygiene (WASH) conditions indicated the need for improved sanitary facilities. As a result, new structures were built, complete with fully functioning toilets and urinals. The project has not only improved the health and cleanliness of children, but it has also enhanced the whole educational environment.

The Michael and Susan Dell Foundation has made a substantial contribution to improve the water, sanitation, and hygiene (WASH) facilities at government schools in Kallakurichi District. The foundation has supported the development of comprehensive WASH programs that incorporate hygiene education and promotion, ensuring that both students and instructors have the necessary knowledge and practices to maintain adequate hygiene. The focus on menstrual hygiene management has been particularly important within the framework of Water, Sanitation, and Hygiene (WASH) programs in schools. The foundation has also provided funding for the creation of menstrual hygiene management facilities in schools, guaranteeing a safe and dignified environment for adolescent females. The Centre for Science and Education has been instrumental in promoting the implementation of Water, Sanitation, and Hygiene (WASH) practices in schools within the Kallakurichi District. The center has conducted comprehensive research on the impact of WASH (Water, Sanitation, and Hygiene) on educational outcomes and has developed evidence-based initiatives to improve WASH infrastructure in schools. As an illustration, the center has produced a strategy plan that emphasizes the importance of including many stakeholders, including community members, civil society organizations, and local authorities, in the planning and implementation of WASH initiatives. The approach has been widely adopted across the state and has significantly contributed to improving the WASH infrastructure in schools.

The Water for People organization has made a substantial contribution to improving the water, sanitation, and hygiene (WASH) infrastructure at government schools in the Kallakurichi District. The organization has formed broad partnerships with local authorities and other stakeholders to develop and implement comprehensive WASH initiatives that incorporate hygiene education and promotion. Water for People has supported the implementation of school-based WASH projects that prioritize improving hand hygiene. This ensures that both students and teachers have sufficient access to clean water and sanitation facilities. This has been essential in addressing the issue of waterborne diseases, which present a significant

public health hazard in the region. The Kallakurichi District in Tamil Nadu has made significant advancements in improving water, sanitation, and hygiene (WASH) facilities in government schools, mainly due to the joint efforts of several renowned non-governmental organizations (NGOs) and civil society organizations (CSOs). These groups have made substantial contributions to enhancing the overall health and educational environment for kids, teachers, and the broader community. Their contributions have been crucial in addressing the recurring issues of inadequate WASH facilities, improving access to clean drinking water and sanitation facilities, and promoting proper hygiene practices.

Fundraising for WASH for NGOs and CSOs

NGOs and CSOs are essential in mobilizing resources to provide water, sanitation, and hygiene (WASH) services to the entire population of Tamil Nadu. The Tata Trusts, a charitable organization, has been extensively engaged in Water, Sanitation, and Hygiene (WASH) efforts throughout the state. The "Tata Trusts WASH Program" was initiated in 2020 with the aim of enhancing the availability of clean water and sanitation amenities in rural regions. Dasra, a non-profit organization, aims to enhance the well-being of neglected people in Tamil Nadu. In 2020, they initiated the "Dasra WASH Program" to ensure that rural areas have access to clean water and proper sanitation facilities. Oxfam India, an international philanthropic organization, has been actively engaged in Tamil Nadu to enhance the availability of water, sanitation, and hygiene (WASH) services. The "Oxfam India WASH Program" was initiated in 2020 with the aim of offering marginalized communities access to secure water and sanitation amenities. Save the Children, a global humanitarian organization, has been working in Tamil Nadu to enhance the availability of WASH facilities. The "Save the Children WASH Program" was initiated in 2020 with the aim of offering marginalized children access to secure water and sanitation amenities.

WaterAid India, a non-governmental organization, specifically works on enhancing the availability of clean water and sanitary amenities in the state of Tamil Nadu. The "WaterAid India WASH Program" was initiated in 2020 with the aim of delivering secure water and sanitation amenities to underprivileged areas. UNICEF India, an international philanthropic organization, has also been actively involved in Tamil Nadu to enhance the availability of water, sanitation, and hygiene (WASH) services. The "UNICEF India WASH Program" was initiated in 2020 with the aim of offering marginalized children access to secure water and sanitation amenities. The Tamil Nadu government allocates cash for WASH initiatives through different programs and schemes, including the "Tamil Nadu Water Supply and Drainage Board." This board provides funds for the development and upkeep of water supply and drainage infrastructure. Several firms in Tamil Nadu also support WASH projects through their Corporate Social Responsibility (CSR) funds, like the "Tata Steel CSR Fund" which allocated cash for WASH programs in rural regions in 2020. International financial agencies, such as the Asian Development Bank (ADB) and the World Bank, allocate financing for Water, Sanitation, and Hygiene (WASH) efforts in Tamil Nadu. The ADB granted a \$100 million loan in 2020 to enhance the availability of safe water and sanitation amenities in rural regions. Local communities in Tamil Nadu also participate to WASH projects through self-financing, shown as the "Tamil Nadu Rural Water Supply and Sanitation Project" which gained financial support from local communities in 2020 to enhance access to clean water and sanitation facilities.

NGOs Providing Clean Water and Access to Sanitation across the Country

Amid pressing global challenges including water scarcity and insufficient sanitation, numerous Non-Governmental Organizations (NGOs) have arisen as vital agents of change. These groups are committed to advocating for equitable and inclusive availability of clean water and sanitation facilities in different regions across India. These non-governmental groups, driven by a shared commitment to sustainable development, employ innovative methods that range from rainwater harvesting to the implementation of community-led sanitation projects. Through their persistent efforts, they not only alleviate existing water-related challenges but also empower communities to cultivate resilience against future calamities. The collaborative endeavor showcases a resolute dedication to promoting well-being, respect, and ecological accountability, illustrating the profound influence of community-driven initiatives. Across the country, a multitude of non-governmental organizations (NGOs) are actively addressing the urgent issues of water scarcity and inadequate sanitation, recognizing the vital connection between clean water and sanitation in relation to human welfare and dignity. Considering India's current water challenges, which are projected, to worsen by 2030, these organizations are making persistent endeavors to secure the long-term availability of clean drinking water and sanitation services.

These endeavors are particularly significant in Tamil Nadu, a state grappling with its own water challenges. Organizations like Sankalpa Rural Development Society and Swades Foundation play an active role in recharging groundwater and assuring the availability of clean water for both home and agricultural purposes. They accomplish this by advocating for rainwater gathering methods, building check dams, and restoring traditional water reservoirs. The Rural Development Organization (RDO) Trust is taking the lead in addressing the lack of household toilets in the Nilgiris region. They are enabling individuals in rural areas to build sanitary facilities, hence improving public health outcomes. The scope encompasses not just physical infrastructure, but also encompasses changes in behavior and the active participation of the community. Water for People India and Navjyoti India Foundation place emphasis on employing sustainable methodologies and fostering community ownership to guarantee the enduring feasibility of water and sanitation initiatives. These non-governmental organizations foster a culture of responsibility and self-empowerment among community members by undertaking initiatives including providing training for water user committees and spreading education on hygiene. Efforts to address water scarcity sometimes align with broader goals of environmental conservation. The "Revive Lakes" initiative led by Bhumi not only rehabilitates vital water reservoirs but also fosters consciousness regarding environmental stewardship and civic responsibility. The water management initiatives implemented by the Sehgal Foundation employ advanced technology to guarantee the supply of potable water and promote sustainable practices aimed at mitigating the impact of waterborne illnesses. These non-governmental organizations (NGOs) have formed a diverse and dedicated coalition with the common goal of ensuring equitable and universal access to clean water and sanitation services for all. Their all-encompassing approach, encompassing infrastructure development, community involvement, and environmental protection, emphasizes the interconnectedness of water security, public health, and sustainable development. This fosters hope for a future in Tamil Nadu and abroad that is more robust and stable in terms of water supplies.

Significance of safe water, sanitation, and hygiene (WASH)

The importance of safe water, sanitation, and hygiene (WASH) cannot be emphasized enough. It not only represents a fundamental human entitlement but also acts as a crucial element for comprehensive progress, including improvements in health, nutrition, education, and socioeconomic results. Girls, women, and individuals with disabilities, who are vulnerable populations, have a greater burden of inadequate WASH facilities compared to others. This emphasizes the need for urgent and comprehensive solutions. The We Foundation (TWF) plays a crucial role in achieving universal access to properly managed water and sanitation by 2030, as outlined in the Sustainable Development Goals (SDGs), particularly SDG 6. TWF employs a variety of tactics that focus on meeting the demand for toilets, promoting behavior change, managing waste, and engaging with the community. These strategies are designed to achieve sustainable outcomes in water, sanitation, and hygiene (WASH). The "Care for Hands" campaign, carried out in collaboration with Children for Change, BMC, and WHO, highlights the vital connection between hand hygiene and illness prevention, specifically targeting prevalent health concerns such as pneumonia and diarrhea. By directly benefiting more than 19,000 individuals and reaching a total population of 135,520. The activities of TWF go beyond immediate effects, establishing the foundation for long-term improvements in health, hygiene, and socioeconomic progress, not only in Tamil Nadu but also across the entire country.

Figure 1.1: Significance of safe water, sanitation, and hygiene (WASH)

Significance of safe water, sanitation, and hygiene (WASH)	
Human Right	Safe water, sanitation, and hygiene are fundamental rights for health and dignity.
Development Impact	They are crucial for holistic development, affecting health, education, and socioeconomic status.
Vulnerable Groups	Disadvantaged populations, including girls, women, and those with disabilities, suffer most from inadequate WASH.
SDG Alignment	WASH efforts align with SDG 6, aiming for universal access to clean water and sanitation by 2030.
Health Benefits	Improved WASH infrastructure directly reduces waterborne diseases, enhancing public health.

Source: Primary Data

Impact of Improved WASH Facilities on Student Health, Attendance, and Performance

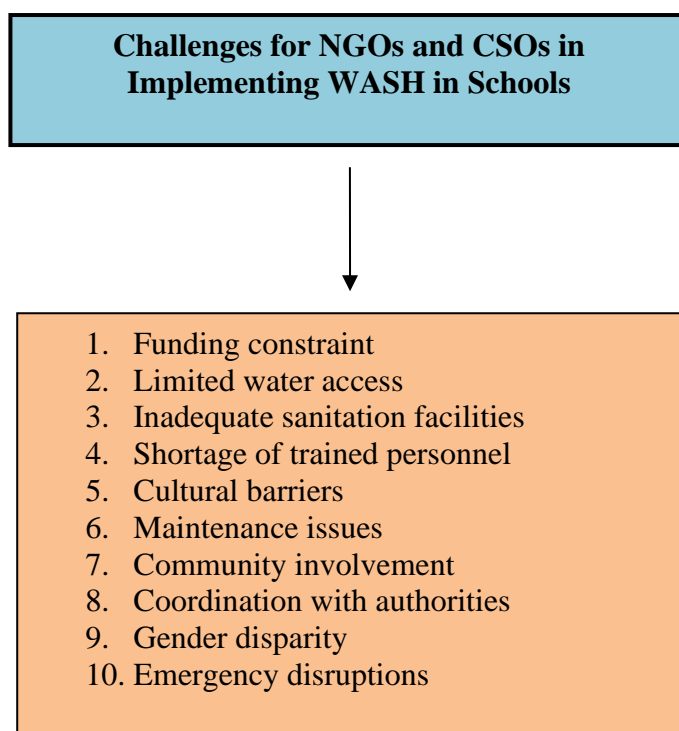
The availability of enhanced WASH (Water, Sanitation, and Hygiene) facilities in government schools in Tamil Nadu has been found to have a significant impact on student health, attendance, and academic performance. The state government has made considerable efforts to improve the infrastructure and facilities in these schools, which has led to a notable improvement in the overall well-being of students. One of the most significant impacts of enhanced WASH facilities is on student health. According to a study conducted by the Tamil Nadu government, the incidence of waterborne diseases such as diarrhea, cholera, and typhoid decreased by 35% in schools with improved WASH facilities. This has led to a decrease in absenteeism due to illness, allowing students to attend school regularly and focus on their studies. The improved health conditions have also reduced the risk of long-term health complications, enabling students to grow and develop in a healthy environment. The enhanced WASH facilities have also had a positive impact on student attendance. A study conducted by the World Health Organization (WHO) found that schools with improved WASH facilities experienced a 25% increase in student attendance. This has led to an increase in student engagement and participation in learning activities, ultimately leading to better academic outcomes.

The enhanced WASH facilities have directly influenced academic performance. A study conducted by the Indian Institute of Technology (IIT) revealed that children attending schools with enhanced Water, Sanitation, and Hygiene (WASH) facilities achieved a 15% greater performance in mathematics and science compared to students in schools with inadequate WASH facilities. The improved WASH facilities have also established a more favorable learning atmosphere, as pupils are more inclined to experience comfort and self-assurance in their capacity to learn and engage in class. The improved WASH facilities have also positively influenced the general mood and motivation of pupils. A study undertaken by the National Institute of Educational Planning and Administration (NIEPA) revealed that children attending schools with enhanced Water, Sanitation, and Hygiene (WASH) facilities had a notable 20% rise in their overall contentment with the school infrastructure. Consequently, there has been a rise in student involvement and active participation in extracurricular pursuits, fostering the cultivation of crucial life competencies and bolstering academic achievement as a whole. The improved water, sanitation, and hygiene (WASH) facilities at government schools in Tamil Nadu have had a substantial influence on the health of students, their attendance rates, and their academic achievements. The presence of uncontaminated potable water, operational sanitation facilities, and adequate hand hygiene resources has led to a decrease in the prevalence of waterborne illnesses, an increase in student attendance, and an enhancement in academic achievement. Furthermore, these enhancements have fostered a more favorable learning atmosphere and heightened student morale and motivation, ultimately resulting in improved overall student achievements.

Challenges for NGOs and CSOs in Implementing WASH in Schools

The main challenges faced by NGOs and CSOs in implementing WASH programs in government schools in Tamil Nadu are inadequate finance and restricted investment in WASH infrastructure. As a result, there is a lack of maintenance for existing facilities and a shortage of new infrastructure, especially in rural areas. Only 34% of rural schools in Tamil Nadu had functioning toilets in 2020, while 45% of schools lacked sufficient hand washing facilities. Lack of sufficient financial resources weakens the quality and accessibility of water, resulting in subpar sanitation and hygiene standards. Geographical differences provide significant challenges. Rural communities face greater challenges in accessing improved WASH services compared to urban areas due to insufficient infrastructure. In 2019, the percentage of rural households in Tamil Nadu that had access to improved sanitation services was only 22%, whereas the comparable percentage for urban households was 85%. Both poverty and the absence of communal sanitation facilities are factors that contribute to the adoption of insufficient WASH practices. Climate change poses additional hazards. Notable concerns encompass the destruction of infrastructure due to flooding, the decrease in water resources induced by less rainfall, and the compromised quality of water. In 2019, Tamil Nadu experienced severe droughts that had a harmful effect on the accessibility and quality of water. Understanding the relationship between climate change, land use, population characteristics, and economic activities is essential for guaranteeing water security.

Figure 1.2: Challenges for NGOs and CSOs in Implementing WASH in Schools



Source: Primary Data

Insufficient knowledge about water-borne diseases and how they spread throughout communities also hinders WASH operations. There is a requirement for health education that specifically emphasizes the significance of WASH practices in the prevention of water-borne infections. Tamil Nadu had 143,000 cases of water-borne diseases in 2018, leading to 1,200 deaths. An important challenge that has to be tackled is the insufficient engagement of the local community in WASH projects. These characteristics can lead to challenges in maintaining cultural traditions, negative attitudes, and inefficient communication during the adoption process. The effectiveness of WASH programs relies heavily on the effective engagement of the community. The fast urbanization in Tamil Nadu has intensified the strain on resources that may be dedicated towards improving sanitary infrastructure. Urbanization has led to the clustering of people in areas with insufficient sanitation infrastructure, causing a failure to fulfill the growing need for better water, sanitation, and hygiene (WASH) services among urban residents. In 2020, 47% of the population of Tamil Nadu lived in urban areas, but 35% of urban households lacked access to sufficient sanitation services.

The lack of skilled personnel and insufficient laboratory equipment significantly diminish the quality of water and water delivery services. This is exacerbated by a deficiency in sufficient funds. Only 20% of water treatment plants in Tamil Nadu had adequate laboratory facilities in 2019. Inadequate protection of water supplies, restricted access to uncontaminated water, and dependence on filthy water from unprotected sources present further challenges. Water streams often experience contamination from human excrement due to a scarcity of latrines. In 2018, 45% of rural households in Tamil Nadu relied on unprotected wells for their drinking water source. A significant worry is the failure of small water treatment plants to adhere to set criteria for drinking water quality and management. This results in inadequate provision of water supply and sanitary services, especially in rural areas. Only 30% of minor water treatment plants in Tamil Nadu adhered to the prescribed standards for ensuring the quality of drinking water in 2019. In the end, cultural customs and possible negative attitudes towards WASH initiatives can hinder the efficacy of these programs. Effective community engagement is necessary to overcome these challenges.

Community Participation and Partnerships in Sustaining NGO-Led WASH Projects

Community participation and local partnerships play a crucial role in the success and sustainability of

WASH projects led by NGOs and CSOs in Tamil Nadu. Effective community engagement is essential for ensuring that WASH interventions align with local needs and priorities, leading to improved health outcomes and long-term sustainability. For instance, a study on community participation in WASH interventions in low- and middle-income countries found that community-led interventions were more successful in reflecting and meeting community needs compared to interventions introduced by external agents with minimal community consultation and involvement. In Tamil Nadu, NGOs and CSOs can leverage community participation by engaging local bodies such as Gram Panchayats and Village Water and Sanitation Committees. These local bodies have immense influence and can catalyze community mobilization, including among marginalized sections. However, there are challenges to be addressed, such as poor capacities and understanding of water and sanitation programs among Panchayats, which can hinder sustained community engagement. To overcome these challenges, NGOs and CSOs can focus on building the capacities of local bodies and community members through training and skill-building programs. This can include training on communication and community engagement, as well as technical skills for operation and maintenance of WASH infrastructure.

NGOs and CSOs can work closely with local communities to identify their needs and priorities, ensuring that WASH interventions are demand-driven and socially inclusive. Community participation can also lead to increased ownership and accountability among community members. When communities are involved in the planning, design, and implementation of WASH interventions, they are more likely to feel a sense of ownership and responsibility for the sustainability of these interventions. This can lead to improved maintenance and management of WASH infrastructure, reducing the risk of failure and ensuring long-term sustainability. Community participation can facilitate the diffusion of new ideas and behaviors related to WASH practices. When community members are involved in WASH interventions, they are more likely to adopt and promote improved WASH practices, leading to a broader impact on community health and well-being. Community participation and local partnerships are critical for the success and sustainability of WASH projects led by NGOs and CSOs in Tamil Nadu. By engaging local communities and building their capacities, NGOs and CSOs can ensure that WASH interventions are demand-driven, socially inclusive, and sustainable in the long term.

Suggestions for strengthening NGO & CSO Effectiveness in School WASH Promotion

Ensuring the availability of Water, Sanitation, and Hygiene (WASH) facilities in educational institutions is crucial for promoting the health, well-being, and academic performance of students. The necessity for efficient WASH interventions is urgent in Tamil Nadu, since the majority of schools are deficient in basic WASH facilities. NGOs and CSOs have a crucial role in advocating for WASH facilities in educational institutions, but they face obstacles that impede their progress. In order to overcome these difficulties and guarantee the continued viability of WASH initiatives, it is crucial to formulate suggestions for policy reforms and methods that might enhance the efficacy of NGOs and CSOs in advocating for WASH facilities at educational institutions.

1. Community engagement and local collaborations must be taken into account. Non-governmental organizations (NGOs) and civil society organizations (CSOs) should actively include local governing authorities like Gram Panchayats and Village Water and Sanitation Committees to utilize their authority and stimulate community mobilization, particularly among marginalized groups.
2. A systems approach is essential for ensuring the effectiveness of WASH programs. The method encompasses activities such as advocating for policy and planning, enhancing infrastructure, utilizing financial resources, developing capabilities, promoting behavior change, strengthening institutions, ensuring accountability, and monitoring progress. It guarantees the inclusion of all parties concerned and organizes the program in a way that acknowledges the intricate relationships among them.
3. Effective stakeholder coordination is essential for the successful implementation of WASH programs. Social network analysis (SNA) can be employed to examine the impact of stakeholder coordination on program performance, emphasizing the significance of varied and intricate stakeholder coordination. Frequent engagement with stakeholders and on-site visits to schools are essential for ensuring ongoing input and enhancement.
4. Capacity building and training are crucial for the effectiveness of WASH programs. Teachers, head teachers, and School Management Committee (SMC) members should get training on water, sanitation, and hygiene (WASH) practices and on creating school WASH development plans based on reliable evidence. Ensuring the long-term viability of WASH facilities requires the development of skills and knowledge in operating and maintaining them.

5. Monitoring and evaluation are essential for tracking progress and ensuring the maintenance and improvement of WASH facilities throughout time. Continuous monitoring and assessment are essential to evaluate progress and guarantee the maintenance and enhancement of WASH facilities over time. Practitioners and NGOs can provide ongoing feedback and observations to enhance the SAP process and provide assistance for corrective measures.
6. In order to incorporate the needs and ambitions of the community into the planning process, it is essential to engage in inclusive and participatory planning. Participatory planning necessitates the engagement of relevant stakeholders, which involves understanding public issues and values and establishing a comprehensive agreement on planned projects.
7. Resource mobilization is essential to provide financial support for the enhancement of WASH infrastructure. Non-governmental organizations (NGOs) and civil society organizations (CSOs) could utilize the resources provided by various corporate entities such as mining funds, corporate social responsibility (CSR) funds, and tribal area development funds to enhance and promote advances in water, sanitation, and hygiene (WASH) infrastructure. Allocating dedicated resources for operation and maintenance is crucial to guarantee the enduring viability of WASH facilities.
8. Advocacy and policy support are essential for the successful integration of WASH facilities into the education system and the efficient allocation of resources. Advocacy is crucial for the integration of WASH facilities into the education system and the proper allocation of resources. Government and other stakeholders must provide support to ensure the ongoing maintenance and enhancement of WASH facilities.
9. Behavior change promotion is crucial to guarantee the adoption and long-term maintenance of WASH practices by students and instructors. It is imperative to provide education on the significance of WASH practices and the function of WASH facilities in preserving health to guarantee enduring sustainability.
10. Ensuring effective resource allocation and maintenance of WASH facilities over time requires sustainability and long-term planning. The sustainability of WASH facilities is paramount, and it requires meticulous long-term planning to ensure optimal resource allocation and ongoing maintenance of the facilities. Regular and ongoing monitoring and evaluation are essential to assess progress and guarantee the maintenance and enhancement of WASH facilities over time.

Final Reflections of the Study

1. NGOs and CSOs play a pivotal role in enhancing Water, Sanitation, and Hygiene (WASH) facilities in government schools, crucial for fostering a healthy learning environment.
2. By raising awareness, providing resources, and mobilizing communities, NGOs and CSOs have reduced waterborne diseases and improved overall health in government schools.
3. Safe water, sanitation, and hygiene are essential for human well-being and development, forming the cornerstone of health and socioeconomic progress.
4. In Tamil Nadu, NGOs and CSOs have been instrumental in enhancing WASH facilities, particularly in government schools, aligning with Sustainable Development Goal 6.
5. Multifaceted strategies, such as demand-driven construction of facilities and behavior change campaigns, have significantly improved health outcomes for students and communities.
6. Challenges including inadequate financing, geographical inequalities, and limited community engagement persist, hindering effective WASH implementation.
7. Community participation and partnerships are crucial for sustaining NGO-led WASH projects; ensuring interventions are tailored to local needs and socially inclusive.
8. Continued collaboration and innovative approaches are needed to address challenges and ensure universal access to safe water, sanitation, and hygiene for all, requiring commitment from NGOs, CSOs, government agencies, and local communities.

Conclusion

NGOs and CSOs play a crucial role in improving Water, Sanitation, and Hygiene (WASH) facilities in government schools, which is essential for creating a healthy and supportive learning environment. These groups have significantly enhanced the WASH infrastructure in government schools in Kallakurichi District, Tamil Nadu, India, providing useful insights for future endeavors. NGOs and CSOs have effectively diminished waterborne diseases, promoted general health, and improved the quality of education through activities such as raising awareness, giving resources, and mobilizing communities. Their participation emphasizes the significance of cooperative endeavors in tackling WASH-related difficulties and showcases the profound

influence of their initiatives. The experiences in Kallakurichi District highlight the crucial importance of non-governmental organizations (NGOs) and civil society organizations (CSOs) in water, sanitation, and hygiene (WASH) projects. These experiences emphasize the capacity of NGOs and CSOs to bring about positive transformations and improve the quality of life for students, teachers, and communities. The importance of safe water, sanitation, and hygiene (WASH) cannot be emphasized enough, as they are fundamental to human well-being and progress. The involvement of Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) in Tamil Nadu, India, has played a crucial role in improving Water, Sanitation, and Hygiene (WASH) facilities, namely in government schools. This has effectively contributed to the creation of a healthy and supportive learning environment. By adhering to Sustainable Development Goal 6 and employing diverse approaches, such as constructing facilities based on demand and conducting campaigns to promote behavioral change, these organizations have greatly enhanced health outcomes and socioeconomic situations for both students and communities. Nevertheless, in spite of these progressions, numerous obstacles endure. Insufficient funding, disparities in regional distribution, the effects of climate change, and a lack of community involvement are major obstacles to the successful implementation of WASH initiatives. Tackling these difficulties necessitates a collaborative endeavor involving governmental entities, local communities, and development collaborators. Community engagement and collaborations are essential for maintaining NGO-led WASH projects. NGOs and CSOs may guarantee that WASH programs are customized to local requirements and are socially inclusive by involving local authorities, enhancing skills, and promoting community ownership. The strategy not only improves the efficiency and long-term viability of WASH efforts but also enables communities to assume responsibility for their health and well-being. Although there has been notable advancement in enhancing WASH facilities in Tamil Nadu, ongoing cooperation and inventive strategies are required to tackle current obstacles and guarantee widespread availability of safe water, sanitation, and hygiene for everyone. The dedication of non-governmental organizations (NGOs), civil society organizations (CSOs), government institutions, and local communities is crucial in attaining this shared objective and cultivating a healthier and more prosperous future for future generations.

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