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Water, Hygiene, and Sanitation in Senegal's School Environment: A Study of the Performance of a Reed Bed Filter Installed at Gandiol School for Wastewater Treatment and Reuse

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Abstract : The article examines clean water and sanitation in Saint-Louis region schools. It finds that 59% have clean water, with disparities between departments, urban/rural areas, and school types. Podor and Dagana lack water due to distance and costs. 70% have sanitation, but rural schools lack it due to low investment. Podor and Dagana suffer the most. Many sanitation facilities need renovation. Wastewater treatment is effective, reducing pollutants and nitrogen, but adjustments are needed for nitrates. Treated water meets Senegalese standards and can be used for irrigation but needs monitoring for strict standards. In conclusion, the wastewater system is good for regions with limited water. Meeting stricter European standards and monitoring for health and environmental standards are needed.

Keywords: water, constructed wetland, sanitation, hygiene

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