6.4.2 "At SPIHER, we actively track and measure water reuse across the campus to promote sustainable water management and responsible usage."

St. Peter's Institute of Higher Education and Research (SPIHER) follows a structured and well-documented system to measure the reuse of water across the campus. As part of its strong commitment to sustainability and responsible resource management, SPIHER ensures

that all treated and recycled water is carefully monitored, recorded, and utilized efficiently for various non-potable purposes.

SPIHER operates a dedicated **Sewage Treatment Plant (STP)** that treats wastewater generated from hostels, academic blocks, administrative buildings, and other facilities. The STP is equipped with calibrated flow meters, which measure the total volume of treated water produced daily. These readings are compiled into monthly logs maintained by the Engineering and Maintenance Department. The data includes details such as the volume of water entering the STP, the quantity treated, and the amount reused on campus.

A large portion of the treated water is reused for **gardening, landscaping, and maintaining green areas** on the campus. Irrigation systems, including drip lines and sprinklers, use the recycled water effectively, reducing the need for fresh water. The volume of water used for irrigation is also monitored with the help of distribution meters and usage schedules. This helps SPIHER estimate the exact quantity of water reused for green maintenance during each season.

In addition to landscaping, treated water is also utilized for **toilet flushing and general cleaning purposes** in selected buildings. The consumption in these areas is monitored through overhead tank readings and building-level water meters that track inflow and usage patterns. These records help the institution understand water-saving outcomes and plan future improvements.

SPIHER also measures the contribution of **rainwater harvesting** to water reuse. Rooftop rainwater collected through harvesting systems is directed into recharge pits, and the estimated recharge capacity is recorded annually. This provides an additional metric that supports overall water conservation efforts on campus.

Rain water percolation point to improve the ground water level near the Main Block

"The Civil Department conducted an awareness program on Water Conservation and Rainwater Harvesting at Kannapalayam Village on September 12, 2024, promoting sustainable practices and responsible water use."

On September 12, 2024, the Civil Department of SPIHER organized an **awareness program on Water Conservation and Rainwater Harvesting** for students and staff. The program aimed to highlight the importance of sustainable water management and to encourage responsible water usage across the campus. During the session, participants learned about the various methods of conserving water, the significance of reducing wastage, and the role of rainwater harvesting in supplementing the campus water supply. Practical demonstrations and interactive discussions helped attendees understand how simple measures in daily life can contribute to preserving this vital resource. The event also emphasized SPIHER'S ongoing commitment to environmental sustainability and its proactive steps toward building a greener campus. By educating the campus community, the Civil Department hopes to foster a culture of water awareness and stewardship, inspiring everyone to take small but meaningful actions to protect and conserve water for future generations.

Conclusion

Overall, SPIHER's systematic approach to monitoring, treating, and reusing water reflects its strong commitment to sustainable water management. By carefully tracking treated water from the STP, measuring how much is reused for gardening, flushing, and cleaning, and maintaining detailed records through calibrated meters, the institution ensures transparency and efficiency in water use. The reuse of treated wastewater significantly reduces dependence on fresh water, especially for landscaping and non-potable needs, helping the campus maintain its green spaces responsibly. Additionally, the integration of rainwater harvesting further strengthens SPIHER's conservation efforts by naturally replenishing groundwater resources. Together, these practices highlight SPIHER's dedication to environmental stewardship and long-term resource sustainability.