

INSTITUTE OF LIVER & BILIARY SCIENCES

SECTOR D1, VASANT KUNJ, NEW DELHI-70

Date of Audit: 19.05.2023

ENERGY & ENVIRONMENT / GREEN **AUDIT CERTIFICATE**

This is to certify that the "Energy and Environment / Green Audit" for Sardar Vallabhbhai Patel University of Agriculture and Technology, Modipuram, Meerut, (UP) has been conducted on 19th May'2023 to assess Energy Cost, availability and reliability of supply of energy, energy conservation technology and ways to reduce energy consumption alongwith environmental initiatives taken by the University.

The efforts & initiatives undertaken by the University to ensure that energy saving practices are implemented and followed and also to keep the environment friendly atmosphere in a satisfactory condition.

Place: Modipuram, Meerut, UP

Date: 19.05.2023

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Energy & Environment/Green Audit

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17.1 University water resources

The Main water uses in the campus includes drinking, cleaning, toilets and gardening. The University campus has continuous water supply of 09 hours per day through Sardar Vallabbhai Patel University of Agriculture and Technology, Modipuram, Meerut Completed water supply scheme including overhead tank 25 K Liter, UGR, Borewell and Distribution in Girls and boys Hostels, Colleges, residential campus and university gardens. The campus has several water harvesting units to recharge ground water. The water requirement is calculated based on per person utility per day. Toilet usage- 20 lts, Shower- 20 lts, clothes washing- 20 lts, utensil washing - 10 lts, mopping and washing rooms- 10 lts, cooking - 5 litres, drinking -2.5 lts and gardening - 30 lts.



Fig: university water Tank

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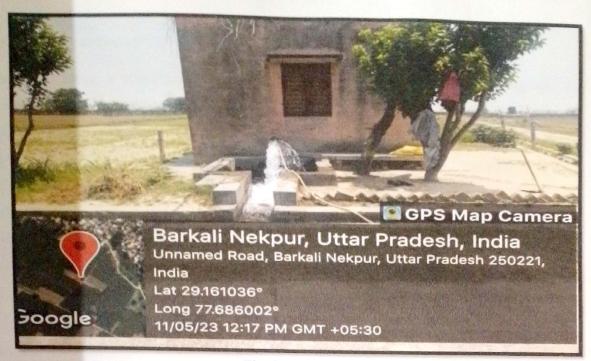


Fig.showing bore well

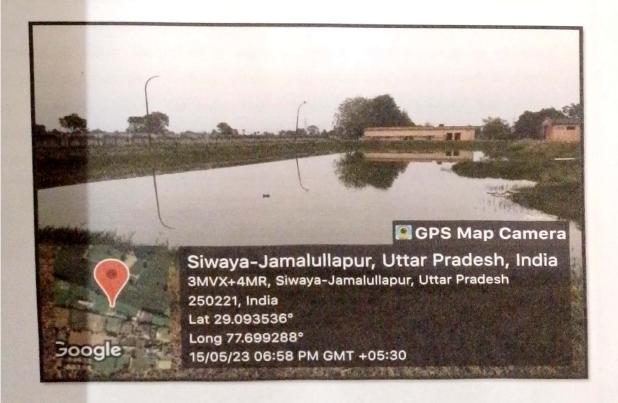


Fig. showing pond for fishery

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17.3 Rain water harvesting

Rainwater harvesting, a technique employed at Sardar Vallabhbhai Patel University of Agriculture and Technology, involves the collection of rainwater at its point of fall or the interception of rainwater runoff. This process, also referred to as a rainwater collection system or rainwater catchment system, encompasses a technology designed to gather and preserve rainwater for subsequent use. To maintain the purity of the collected water, effective filtration methods are employed, and the system is engineered to prevent the contamination of the stored water by pollutants. Rainwater is harvested from both rooftops and ground surfaces to be reused for the irrigation of lawns. Runoff from diverse ground sources and rooftops is gathered, purified, and subsequently reused for the purposes of gardening and washing. In addition to utilizing natural percolation tanks, the construction of concrete storage tanks has been undertaken, facilitating the storage of rainwater post-filtration. Notably, the university has refrained from covering open spaces with concrete roads, allowing for the natural percolation of rainwater. The practice of rainwater harvesting not only conserves water from conventional sources but also reduces the energy expenditure and costs associated with the transportation and distribution of water. The university regularly conducts awareness programs on water conservation and rainwater harvesting, disseminating crucial information through its diverse services. Notably, one of the rain waters harvesting pits is prominently located near the area admistrative building, colleges and hostels with similar structures dispersed throughout the university premises.

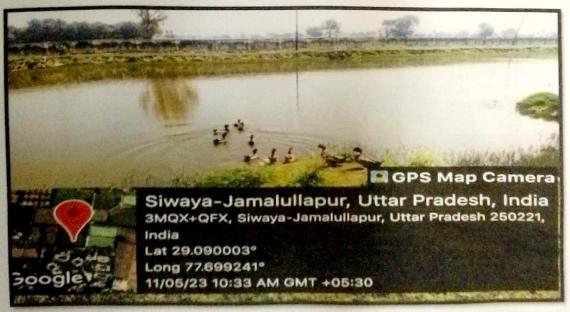


Fig showing rainwater harvesting in SVPUA&T university campus

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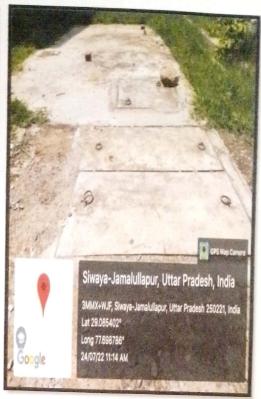


Fig: Showing rain water collection and harvesting and rain water collection tanks

17.4 Reusage of waste water

Wastewater recycling is widely regarded as the most favorable approach to water utilization. After undergoing filtration, the resulting wastewater is employed for the purpose of irrigating outdoor lawns, gardens, potted plants, as well as for the cleaning of staircases, verandas, pavements, and driveways.

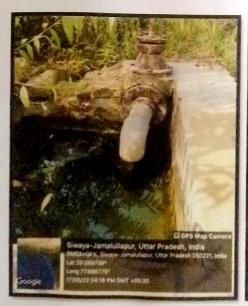




Fig showing reuse of waste water

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