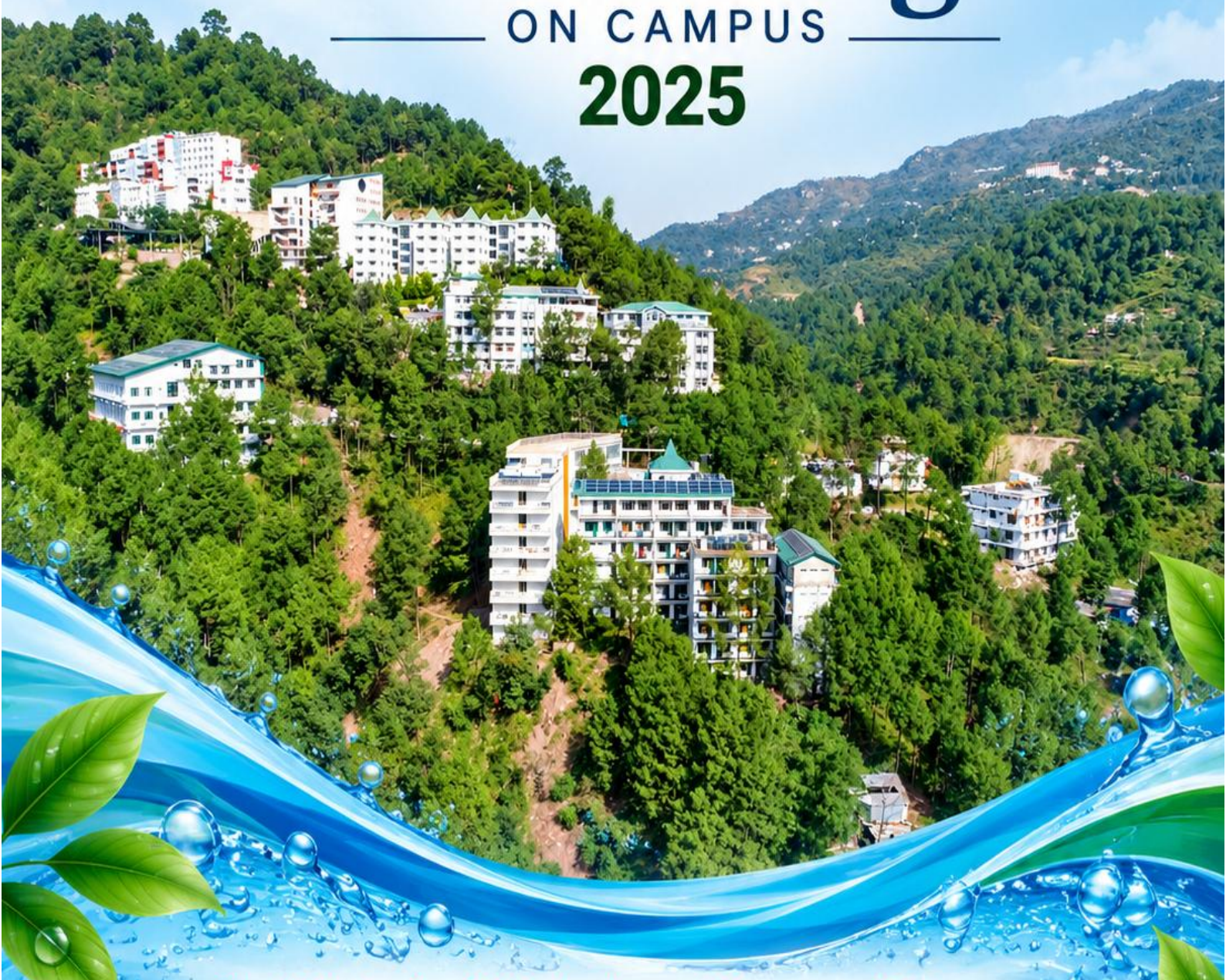
Shoolini University

6 CLEAN WATER AND SANITATION

Promoting conscious water usage!

ON CAMPUS 2025



Shoolini University of Biotechnology and Management Sciences,
Solan, Himachal Pradesh, india-173229

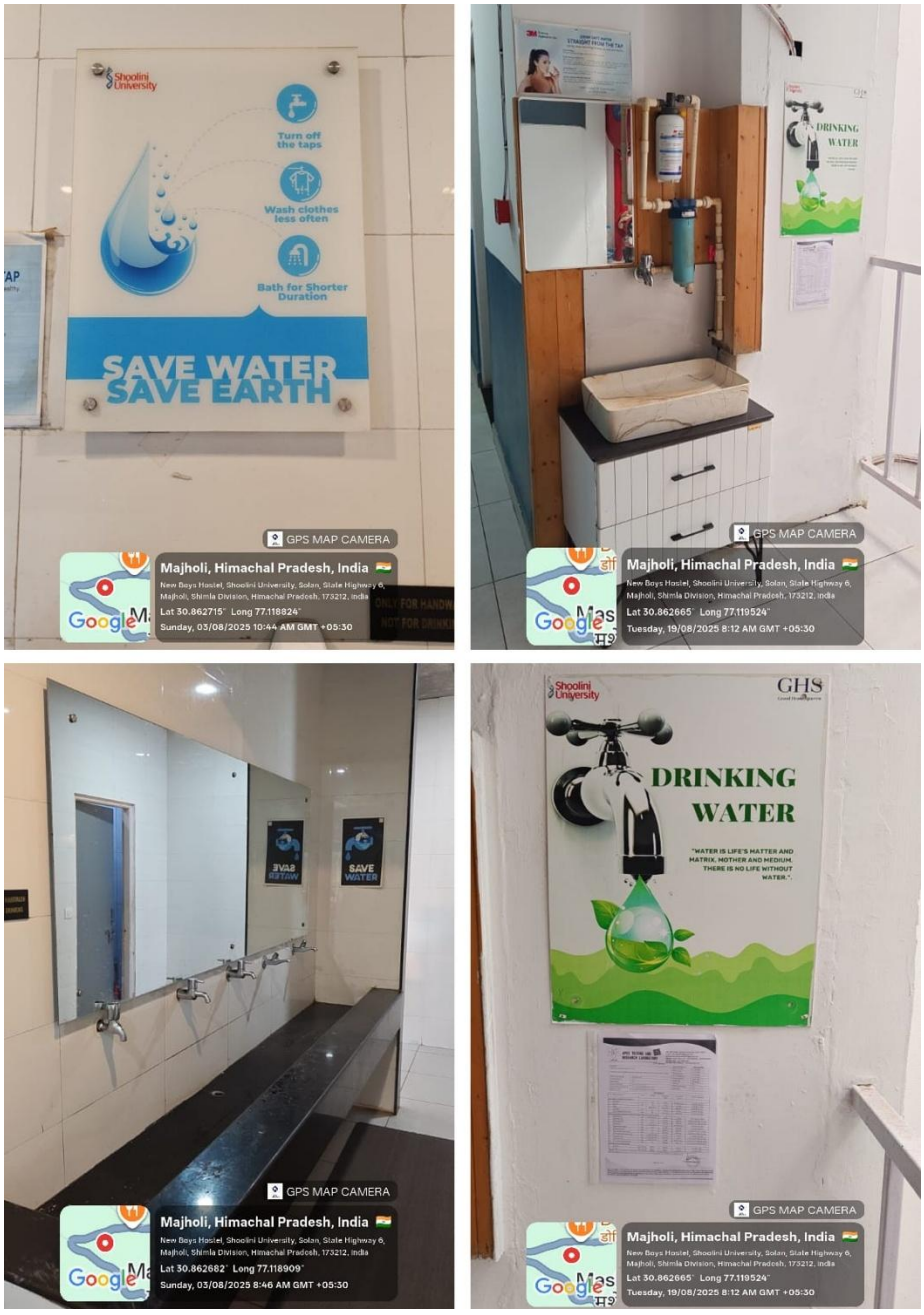
6.5.6 Promoting conscious water usage on campus

Shoolini University actively promotes responsible water consumption through awareness campaigns, educational initiatives and water-efficient practices. The University encourages students, faculty, staff and visitors to minimise water wastage and adopt sustainable water-use habits through the following initiatives:

- **Posters and Signboards:** Displaying water conservation messages and slogans near taps, washbasins and drinking-water facilities.
- **Water Conservation Workshops:** Organising educational sessions on water conservation and rainwater harvesting in collaboration with EIACP and HIMCOSTE at the CSLC Science Museum.
- **Water-Efficient Fixtures:** Promoting conservation through sensor-based taps, dual-flush toilets and 609 low-flow taps across the campus.
- **Rainwater Harvesting:** Collecting and reusing harvested rainwater for irrigation, flushing and other non-potable purposes.
- **Groundwater Recharge:** Using recharge structures and permeable surfaces to reduce runoff and support groundwater replenishment.
- **Wastewater Reuse:** Treating wastewater through the 400 KLD STP and reusing treated water for suitable non-potable applications.

Displaying Posters and Signboards

To promote water conservation across the campus, the University displays water conservation posters, signboards and awareness messages at strategic locations, particularly near washbasins, drinking-water facilities and other water-use areas.. These visual reminders encourage students, faculty, staff, and visitors to use water responsibly and adopt water-saving practices in their daily activities. Through these awareness measures, the University reinforces a culture of water conservation and responsible resource management.



Signboard and Posters in various Locations of Shoolini Campus

Water Conservation Workshops

Centre for Science Learning and Creativity (CSLC) Science Museum, Shoghi, Shimla Workshop Highlight: Water Conservation and Rainwater Harvesting

CSLC, Science Museum, is operated and managed by Shoolini University, which oversees its functioning, activities, and related initiatives. Shoolini University hosted a week-long workshop on Water Conservation and Rainwater Harvesting in CSLC Science Museum, jointly

organised by EIACP (Environmental Information, Awareness, Capacity Building and Livelihood Programme) and Himachal Pradesh Council for Science, Technology and Environment (HIMCOSTE). Throughout the week, participants engaged in informative sessions and practical activities focusing on water conservation, rainwater harvesting techniques, and their role in addressing water-related challenges amid changing climatic conditions. The workshop strengthened awareness of sustainable water management and encouraged participants to connect scientific knowledge with practical conservation measures. The initiative highlighted the importance of responsible water stewardship and collective action in protecting water resources, supporting SDG 6: Clean Water and Sanitation.



Group photographs of workshop held in CSLC Science Museum

Water-Efficient Fixtures:

Shoolini University has installed water-efficient fixtures across the campus to minimise water consumption and prevent unnecessary wastage.

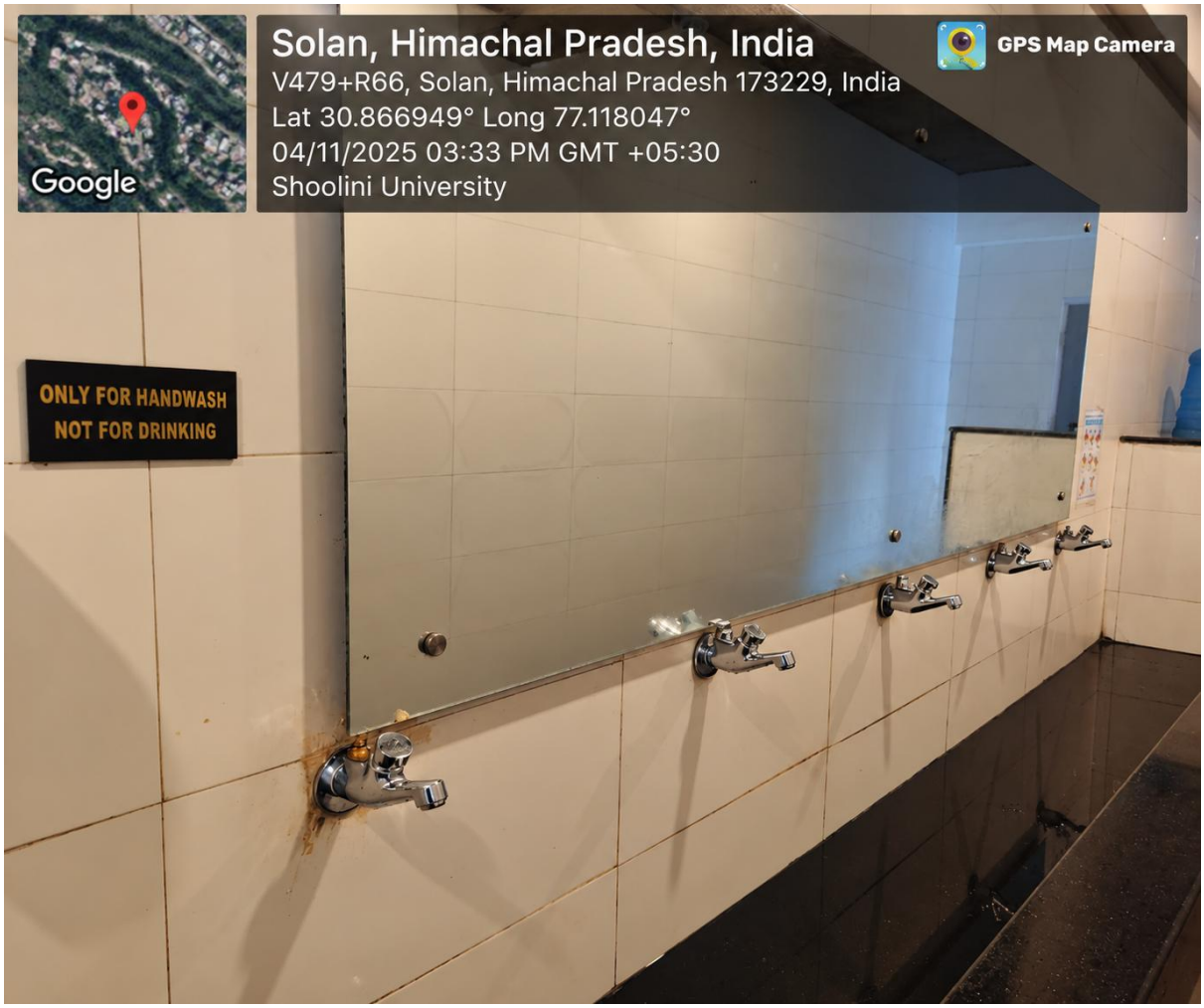
Sensor-Based Faucets: Installed in campus areas to automatically control and minimize unnecessary water flow.



Sensor-Based taps installed in A-Block

Dual-flush toilet systems: In campus washrooms as a water-efficient fixture, enabling users to select an appropriate flush volume and thereby reducing unnecessary water consumption and wastage.

Low Flow taps: Shoolini University has installed **609 low flow taps across the campus**. Reduces water consumption and minimises water wastage.



Low-flow taps installed in hostel mess for handwash

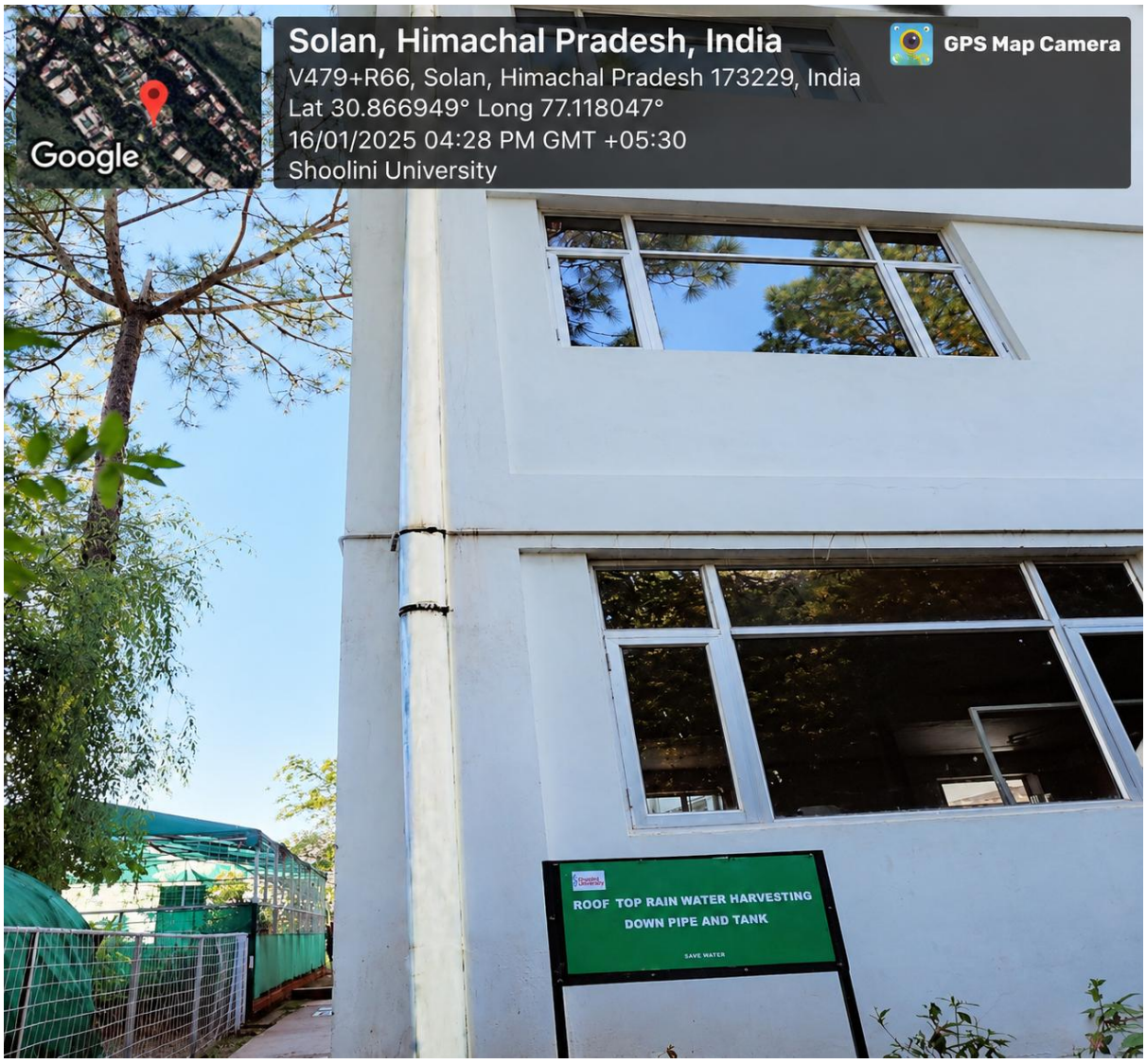
Sustainability in Design and Construction

The architectural design of our buildings reflects our commitment to sustainability. Each structure is meticulously planned to incorporate features that enhance energy efficiency and water conservation. For example, green roofs not only provide insulation but also facilitate rainwater collection, further reducing the demand for external water sources. Moreover, our campus layout promotes the use of permeable surfaces that allow rainwater to infiltrate the ground, reducing runoff and promoting groundwater recharge. This integrated approach to design ensures that every aspect of our campus contributes to our overarching goal of sustainability.

Rainwater harvesting

Shoolini University has adopted a range of innovative water management practices to ensure the sustainable use of this critical resource. The campus is equipped with a well-planned rainwater harvesting system, which includes dedicated chambers for the collection and storage

of rainwater from rooftops and open areas. Harvested rainwater is used for irrigation, flushing and other non-potable purposes, while treated wastewater from the STP is reused for landscaping and other campus needs. To further reduce water consumption, University infrastructure incorporates water-efficient fixtures, permeable surfaces, rainwater recharge pits and efficient drainage systems, helping minimise water wastage and freshwater demand.



Roof-top rainwater harvesting system with downpipe in pharmacy block



Rooftop rainwater collection and conveyance system to dedicated chambers



Rooftop rainwater collection at A Block

Harvested rainwater supporting Construction Activities

Harvested rainwater is used to support construction activities across the University campus, reducing reliance on conventional freshwater sources. Integrating rainwater harvesting into construction projects promotes efficient water use, resource conservation and sustainable campus development. Each building project incorporates appropriate water-management systems, helping minimise freshwater consumption and strengthen the University's commitment to sustainable construction practices.

Groundwater Recharge and Surface Runoff Management

Shoolini University has implemented measures for groundwater recharge and surface runoff management, particularly considering the challenges associated with heavy rainfall in hilly terrain. A rainwater harvesting pond collects and stores excess rainwater during the monsoon season, which is subsequently used for irrigation, landscaping and other non-potable purposes. These measures help reduce surface runoff, support groundwater recharge and minimise

dependence on external water sources. This integrated system not only ensures the sustainable use of rainwater but also helps in reducing surface runoff, safeguarding campus infrastructure, and protecting nearby water bodies from erosion and contamination.



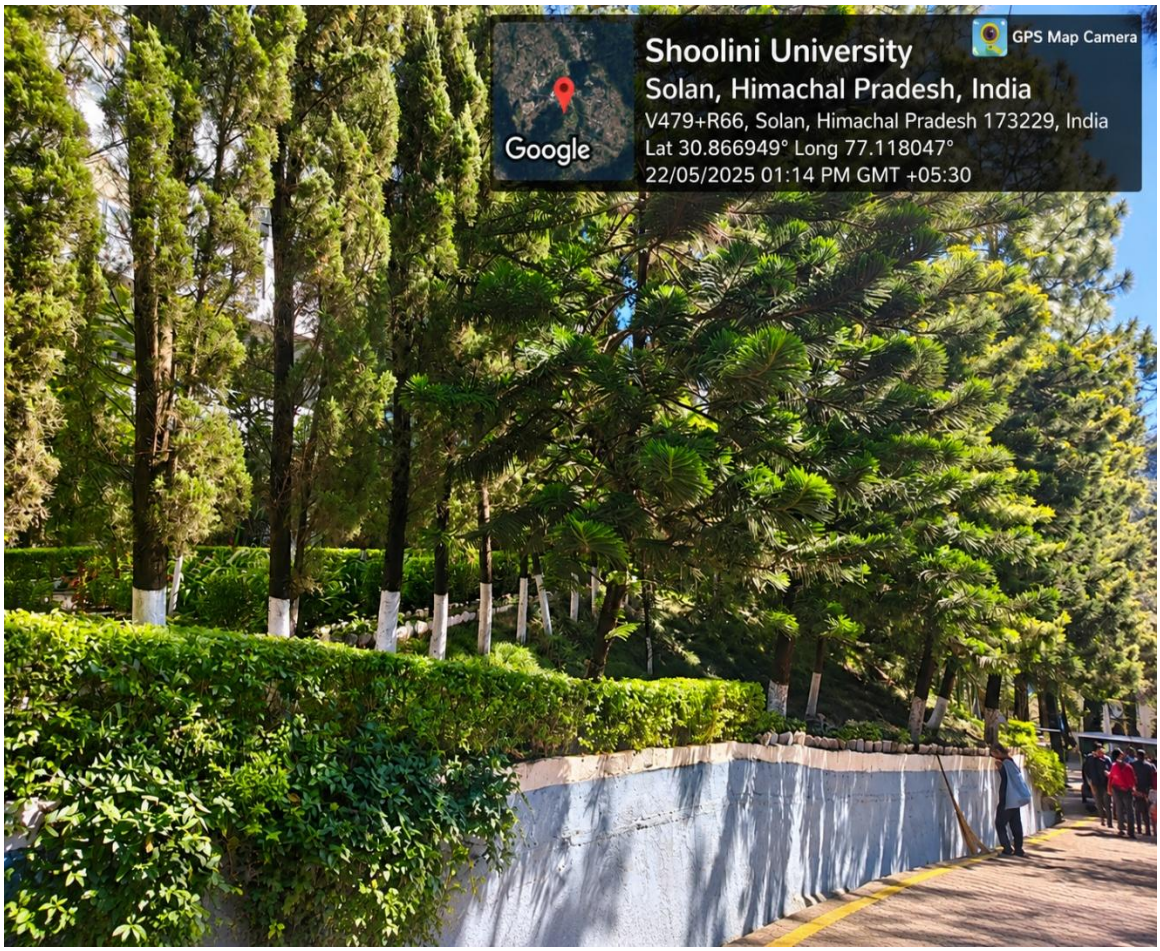
Water tank installed near the plant nursery to support plant irrigation



Groundwater Recharge and Surface water Run-off near Yogananda villa

Water-Efficient Landscaping

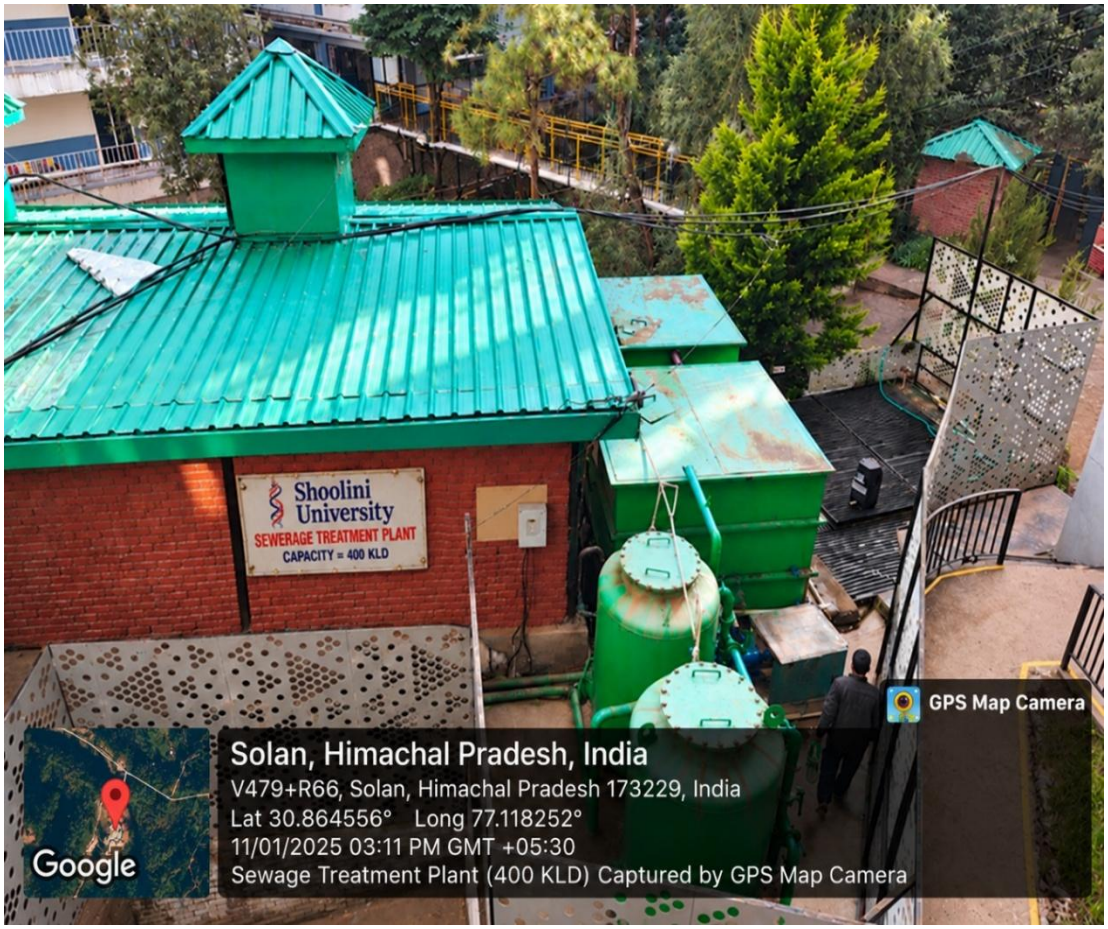
Shoolini University continued to strengthen its commitment to water-conscious landscaping and ecological sustainability through systematic plantation and expansion of campus green cover. During 2025, a total of 1,284 saplings representing 22 recorded species were planted across the University campus. The plantation included species such as Araucaria, Bottle Brush, Drake, Eugenia, Gooseberry, Golden Bottle Brush, Jamun, Jacaranda, Kachnar, Koelreuteria, Lagerstroemia, Nerium, Paltoform, Pencil Juniper, Punica, Putranjiva, Populur, Silver Oak, Tuni, Thuja, Weeping Willow, and Wild Cherry.



Landscape area outside the A block at campus

Wastewater treatment and reuse

Shoolini University has strengthened its commitment to responsible wastewater management and environmental sustainability through its upgraded Sewage Treatment Plant (STP). The University is dedicated to the effective treatment of wastewater and the maximum reuse of treated water for suitable non-potable purposes, thereby promoting water conservation and resource efficiency.



Sewage Treatment Plant having 400 KLD capacity

Conclusion

Shoolini University promotes conscious water usage on campus through rainwater harvesting, groundwater recharge, wastewater treatment and reuse, and the adoption of water-efficient infrastructure. Treated wastewater is reused for non-potable purposes, including landscaping and irrigation, helping reduce dependence on freshwater resources. Awareness initiatives and educational activities further encourage students, faculty, and staff to adopt responsible water-use practices. These measures support the University's commitment to SDG 6: Clean Water and Sanitation. Continued monitoring of water consumption, recycling rates, and conservation outcomes will help strengthen water-use efficiency and advance long-term campus water sustainability.