1. Institutional Framework

Amity University Rajasthan extends over a 152-acre lush green campus, fostering a conducive ecosystem for flora and fauna. The University strongly prioritizes environmental consciousness, located in the semi-arid region of the Indian Thar Desert, by emphasizing xerophytic "Drought Tolerant Plants" in the planning of its green belt. The university has effectively safeguarded these indigenous plants and annually introduced comparable grade species to enhance the green campus. The university actively plans and manages its campus landscape to minimize water usage through dedicated eco-friendly and water-wise practices. A magnificent Neem forest offers walking trails adjacent to the lake. The majority of the campus plantation is conducted with consideration for the water-efficient traits of the plants. Plant irrigation is typically conducted in the evening using water sprinklers that utilize purified lake water. The university utilizes 100 % treated wastewater is stored in an artificial lake for horticulture in all seasons. Moreover, sprinkler irrigation systems are implemented to ensure adequate irrigation while minimizing water wastage. University prioritize drought-tolerant species and native flora suitable for semi-arid environments. University strictly implement watering green areas during evening/night shifts or early mornings to minimize moisture loss due to evapotranspiration under peak solar heat. Strategic recharge wells and rainwater harvesting systems capture runoff to restore local groundwater aquifers, supporting sustainable long-term landscape hydration.



2. Water Conservation and Management at Campus

- Water resources are managed through a closed-loop system ensuring minimal wastage.
- Treated wastewater from the Sewage Treatment Plant (STP) and rainwater harvesting systems is channelized into an artificial lake for reuse in horticulture, flushing, and cooling systems.
- Recharge pits and rainwater percolation systems enhance groundwater replenishment.
- Smart water-level indicators and automatic pump control systems are deployed to prevent overflow or wastage.
- Annual Water Audit and Water Quality Testing are conducted by the Office of Sustainability.

The University systematically measures and monitors the total volume of water drawn from the borewells across the campus, and also monitor the distribution and consumption. Water is distributed through an extensive network of underground sumps and overhead tanks equipped with wireless water-level controllers and monitoring mechanisms to regulate and record supply volumes across academic blocks, hostels, and residential zones. Further, Separate mechanism adopted for treated wastewater through Sewage Treatment Plants (STPs) for horticulture, cooling towers, and toilet flushing, ensuring comprehensive oversight of the campus's total water footprint.

Water Usage (kilo liter) at Amity University Rajasthan : 2025-2026

Month	Borewell	Lake for irrigation	Flushing Total	Chiller Plant for Cooling Tower	ETP out put used for irrigation	Total
Jul'25	9847	6401	2810	906	194	20158
Aug'25	10335	9137	5842	906	496	26716
Sep'25	11931	7926	6579	973	467	27876
Oct'25	12056	5766	4541	390	329	23082
Nov'25	10949	7270	5327	25	376	23947
Dec'25	10929	8152	4369	0	368	23818
Jan'26	12508	7783	3976	0	338	24605
Feb'26	7576	7359	4096	23	339	19393
Mar'26	11457	7718	4387	413	344	24319
Apr'26	12501	9299	5293	1142	366	28601
May'26	12514	9159	5346	1283	343	28645
Jun’26	15109	3818	1877	1147	111	22062
Total	122603	85970	54443	7208	4071	293222

3. Key Events & Initiatives (2024–2025)

Under UBA program, Amity University conducted awareness programs on water utilization, conservation. Also conducted quiz, debate and poster competition for childrens in the panchayat on Water conservation awareness camp: Educate local community on water utilization and management.



Winners are felicitated by NSS coordinator, Dr. Manoj, Kumar, Village Head Chak village

Community Interaction with Adopted Village

Under Unnat Bharat Abhiyan (UBA) initiative, an expert faculty members visited adopted village, interacted with the Gram Panchayat and village representatives. The primary objective of the visit was to engage with the Sarpanch and other village representatives to understand the key challenges faced by the villagers and to explore possible areas of intervention and collaboration. *In addition*, Several concerns and issues related to the village were raised, and the UBA cell assured that these issues would be carefully studied to devise feasible and sustainable solutions. Plans were also made to conduct further surveys and to collaborate with relevant stakeholders for effective problem-solving.



The visit highlighted the importance of continued collaboration between the university and the village community for mutual growth and development. The UBA cell reaffirmed its commitment to working closely with the villagers to address their needs and support the holistic development of the adopted village.

Interaction Meeting with Panchayat head, Chak Charanwas village

4. Research on Water Studies

The Centre of Excellence continues to promote interdisciplinary research and outreach in the domain of water sustainability, wastewater valorization, groundwater conservation, and environmental biotechnology. Research Through impactful publications, collaborative events, and innovative projects, the Centre has reinforced its role as a key contributor to the sustainable management of water resources and the promotion of environmental biotechnology.

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Ukrainian Text © The Author(s), 2026, published in Khimiya i Tekhnologiya Vody, 2026, Vol. 48, No. 4, pp. 513–526.

Critical Review of Water Quality in Rajasthan: Regional Perspective on Human Health, Agriculture, Wildlife, and Environment

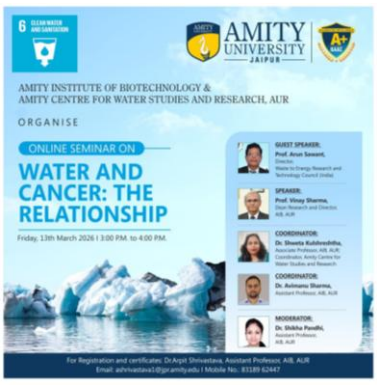
Anuja Saxena[a], Yash Dabholkar[b], Prama E Soloman[c], and Bharat Singh[a, *]

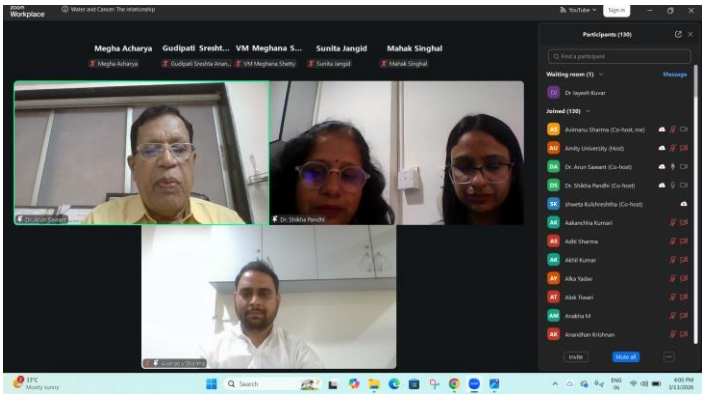
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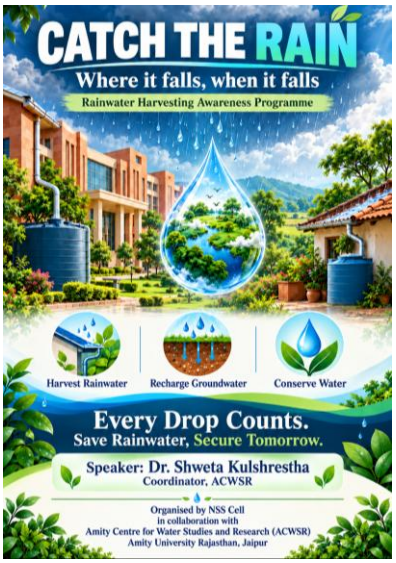
Abstract—Rajasthan, a state of India, is dealing with significant water quality issues due to its dry cli-

5. Awareness Educational Programs





Webinar Organized on 13 March 2026 at Amity University Rajasthan on the topic- Water and Cancer : The relationship. Prof. (Dr.) Arun D. Sawant, Director Waste to Energy Research & Technology Council (WTERT-India) President- Society for Clean Environment (SOCLEEN) has deliver a lecture.

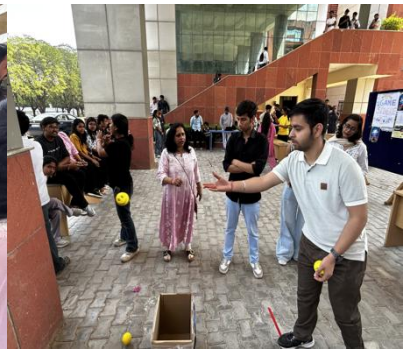




Prof. Swetha Kulshrestha, Director delivered a talk " Catch the Rain"







Save Water" awareness organised at Amity University through fun activity on 27 March 2026 at Amity University Rajasthan.