

[CORE] Social Responsibility (SR)

Sub Criterion: 5.3

SR4 Environmental impact

Sustainability Report

Report on Water Conservation Practices at SRHU

Swami Rama Himalayan University (SRHU) is deeply committed to promoting sustainable water management through a variety of conservation practices on its campus and in surrounding communities. In response to growing challenges such as water scarcity, pollution, and inefficient usage, SRHU has adopted a proactive and responsible approach. The University integrates innovative solutions, infrastructure development, research initiatives, and community awareness programs to ensure the efficient and sustainable use of water resources. These efforts reflect SRHU's ongoing dedication to environmental responsibility and long-term water security.

1. Institutional Water Infrastructure & Conservation

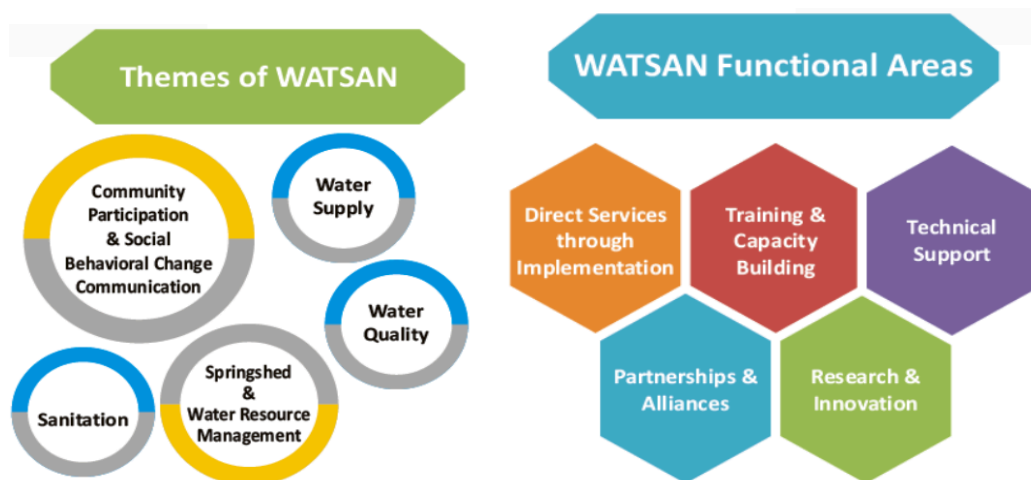
Swami Rama Himalayan University (SRHU) has demonstrated a longstanding commitment to sustainable water and sanitation practices through the dedicated work of its Water & Sanitation (WATSAN) Department. Operational since 1998, the department has been pivotal in advancing water, sanitation, and hygiene (WASH) interventions across Uttarakhand, directly benefiting over 200 villages. These efforts have empowered communities to take ownership of water conservation and hygiene practices, improving public health outcomes across the region.



WATSAN department at Swami Rama Himalayan University

Key projects implemented include:

- Establishment of a dedicated Water & Sanitation Resource Centre, supported by IRC Netherlands.
- Participation in the Swajal Sector Reform Program (SWAp).
- Execution of the Himmothan Pariyojana, in collaboration with Tata-Titan and the Hans Foundation.
- Implementation of the Nirmal Bharat Abhiyan / Total Sanitation Campaign.
- Contributions to the Urban Sector Development Investment Program.



Major themes and functional areas covered by WATSAN

Through its flagship institution—the Himalayan Institute Hospital Trust (HIHT)—SRHU has received national recognition for its impactful work. The Ministry of Jal Shakti, Government of India, has empaneled HIHT as a CSR partner, ranking it 4th nationally and the only representative from Uttarakhand. Additionally, HIHT has been designated as a National Key Resource Center (NKRC) under the Swachh Bharat Mission (Gramin), underscoring its leadership in strengthening rural WASH systems.

Accomplishment



550+ VILLAGES TRANSFORMED IN WATER ENLIGHTENED VILLAGES

- 342+** Water supply schemes implemented
- 600+** Rain water Harvesting Tanks constructed
- 14000+** Toilets constructed
- 150+** Hectare Springshed area treated

TRAININGS & CAPACITY BUILDINGS

- 8000+** Functionaries of Line departments including Engineers and community Stakeholders under JJM
- 25000+** Community Persons including PRIs, Swachhagrahis, ASHAs trained
- 303+** Village Water Sanitation Committees (UWSCs) formed & trained



RESEARCH & INNOVATION

- 2** Patents
- 10+** Researches
- 30+** Development Projects

- 25+** Partnerships including Government, National & International Development agencies



Accomplishments of WATSAN under clean water and sanitation

Activities undertaken by WATSAN during 2024-2025

1. Capacity Building for Har Ghar Jal (Jal Jeevan Mission)

SRHU conducted a series of change management training for public health engineers and mid-level officials. These were held in:

- Haldwani (01–02 July 2024) – 44 participants
- Rudrapur (05–06 July 2024) – 45 participants
- SRHU campus (15–16 July 2024) – 35 participants
- Srinagar, Pauri (29–30 July 2024) – 40 participants

Supported by the State Water & Sanitation Mission, Government of Uttarakhand, these sessions aimed to enhance the capacity of stakeholders implementing rural water supply programs.



Haldwani Training Session: Public health engineers and mid-level officials engage in change management training to strengthen rural water supply programs



Rudrapur Training Session: Participants were informed with practices to implement water and sanitation initiatives during workshop



SRHU Campus Training: Focused training session aimed at building capacity among public health officials for effective rural water supply management



Srinagar, Pauri Training: Stakeholders collaborate and learn new approaches in change management to support sustainable water and sanitation services

2. Community Engagement on RDI Foundation Day

On 20–21 September 2024, RDI Foundation Day was celebrated with activities held across the SRHU campus and villages including Pasta, Tashila, Moldhar, and Jaswawala. The event saw participation from over 200 students and villagers, focused on awareness and community-led WASH initiatives.



Over 200 students and villagers gather at SRHU campus and nearby villages to promote awareness and community-led WASH initiatives

3. Swachhta Pakhwada – Campus-Wide Sanitation Campaign

From 23 September to 1 October 2024, SRHU organized a sanitation and hygiene awareness campaign across its campus, engaging 328 students and faculty members in promoting clean practices and environmental stewardship.



Employees at SRHU take a collective pledge to uphold sanitation and hygiene for a healthier campus and community



Street play at SRHU raises awareness on hygiene practices and environmental responsibility among students and staff

4. Social and Environmental Audit of Sewage Infrastructure

From 01 January to 15 June 2025, SRHU led a social and environmental audit of seven Sewage Treatment Plants (STPs) and two Interception and Diversion sites across Dehradun, Haridwar, Tehri Garhwal, and Nainital. This audit was conducted in collaboration with Namami Gange and the State Mission for Clean Ganga (SMCG).



SRHU team and partners engage in detailed discussions during the social and environmental audit of STPs



The field team conducts hands-on inspection of a Sewage Treatment Plant as part of the collaborative audit with Namami Gange and SMCG

5. GESI-Responsive Springshed Management in the Hindu Kush Himalaya

From 29 January to 1 February 2025, SRHU hosted a training on Gender Equality and Social Inclusion (GESI)-Responsive Springshed Management in the Hindu Kush Himalaya. With 63 participants from 11 Indian states, Nepal, and Bhutan, this program was conducted with ICIMOD and GBPNiHE to promote inclusive water resource planning.



Experts and participants from India, Nepal, and Bhutan gather at SRHU to discuss inclusive water resource planning in the Hindu Kush Himalaya.



Practical session showcasing inclusive springshed management technique

6. World Water Day – Rural and Campus Outreach

On 22–23 March 2025, SRHU marked World Water Day through educational outreach in both rural communities (Kokaliyal, Tachla, Gudiyawala, and Thano) and on-campus events. A total of 529 students and community members participated in water conservation and hygiene promotion activities.



SRHU students take part in interactive events focused on raising awareness about water sustainability and hygiene practices



Pledge ceremony with rural communities in Kokaliyal, Tachla, Gudiyawala, and Thano to promote water conservation and hygiene on World Water Day

7. Affordable Climate-Resilient Water Supply Infrastructure Project

On 29 March 2025, SRHU initiated a long-term project focused on developing affordable, climate-resilient water supply infrastructure in five Himalayan districts: Pauri, Rudraprayag, Chamoli, Tehri, and Uttarkashi. Supported by the National Mission on Himalayan Studies (NMHS) under the MoEFCC, this project aims to improve drinking water access in ecologically sensitive areas.



SRHU team and local stakeholders collaborate to plan affordable and sustainable water infrastructure for Himalayan districts



Project team evaluates existing water supply systems to develop climate-resilient solutions for improved drinking water access

8. Co-Learning and Exposure Visit on Springshed Management

A co-learning program on Springshed Management for Water Security was held on 22–23 April 2025, bringing together 32 participants, including mayors from Nepal and Uttarakhand. This initiative, supported by ICIMOD, facilitated the exchange of best practices in integrated water resource management.



Stakeholders from Nepal and Uttarakhand come together at SRHU to exchange best practices for integrated water resource management

9. Participation in State-Level Water Governance

On 26 May 2025, SRHU contributed to water governance dialogue by participating in the Executive Committee meeting of the State Water & Sanitation Mission (SWSM) in Dehradun, further strengthening its role in shaping public policy on water management



SRHU representatives actively engage in policy discussions to advance water governance and sustainable management in Uttarakhand

10. **Water Conservation Awareness in Industry**

On 4 June 2025, SRHU organized an awareness session at Wipro Enterprise Ltd, SIDCUL, Haridwar, engaging 24 staff members on water conservation and waste management. This collaboration emphasized sustainable practices within the industrial sector



Hands-on session on water quality testing to promote sustainable water conservation and waste management practices

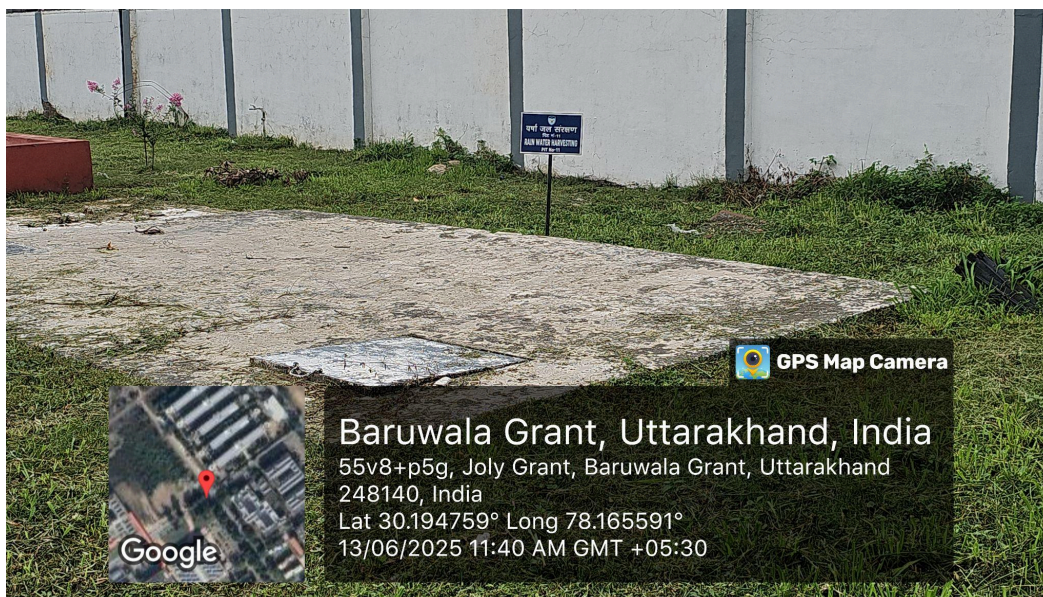
2. Rainwater Harvesting and Groundwater Recharge

Rainwater harvesting is implemented extensively across the campus with a blend of traditional engineering and modern filtration systems. A series of recharge pits and filter beds have been constructed across academic and residential zones. The harvested rainwater is stored in underground tanks, used for flushing, cleaning, and groundwater recharge, significantly reducing the need for extracted groundwater.

- Total rainwater harvesting capacity: Approximately 40 crore liters
- Underground tank capacity: 1.5 lakh liters
- Daily reuse from tank: 3,000 liters for 111 toilets and 138 taps
- Total rooftop area utilized: 9,000 sq. meters
- Annual groundwater recharge from harvested water: 1.57 crore liters
- Rainwater used for flushing and cleaning: 9.45 lakh liters/year

Key recharge pit specifications:

- Guest House Area: 3 pits with filter beds (6.42×2×1.5 m) and recharge depth of 6 m
- New OPD Zone: Multiple pits of 3 m diameter × 12 m depth
- Medical College (SBI Bank): Filtration system with recharge pit of 3 m diameter × 3.35 m depth



Rainwater Harvesting Pit at SRHU



Rain water harvesting pit at SRHU near MBBS girls Hostel



Rain Harvesting pit near Cardio Block ,SRHU



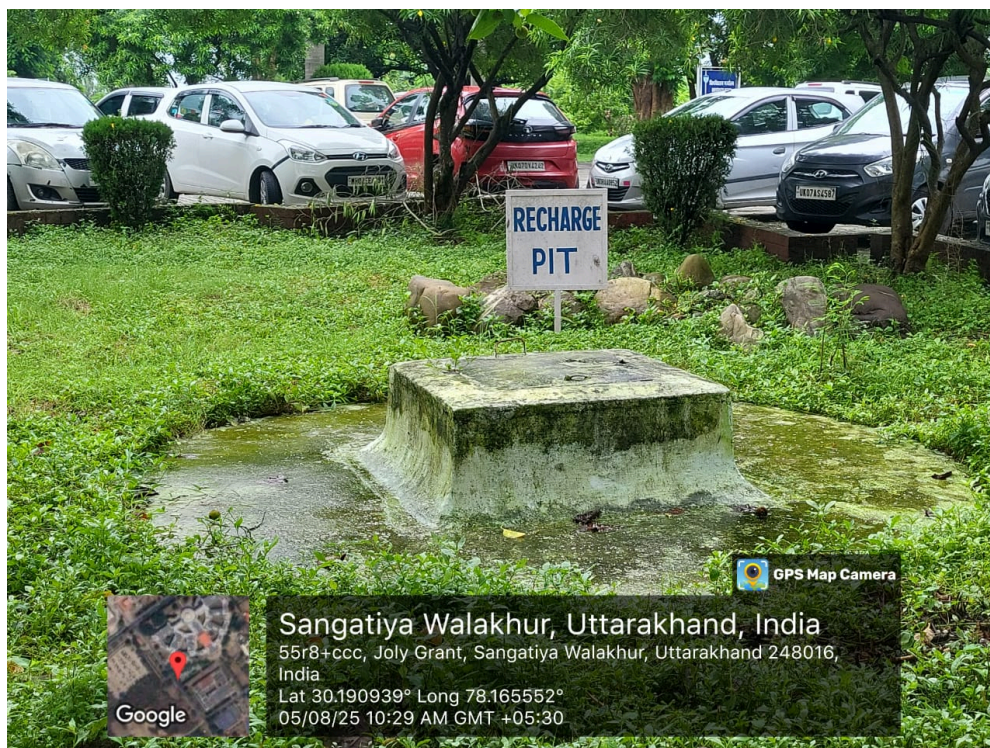
Rain Harvesting Pit near New OPD Block



Rain water harvesting pit no 15 near School of Pharmacy, SRHU



Underground water tank at SRHU



Recharge Pit near University Office

3. Wastewater Treatment & Reuse

Swami Rama Himalayan University (SRHU) has established a comprehensive, environmentally responsible wastewater management framework to address the safe treatment, recycling, and reuse of both domestic sewage and industrial effluents generated on campus. This system reflects the University's commitment to sustainable water use, public health protection, and long-term ecological balance.

At the heart of this framework is a state-of-the-art Sewage Treatment Plant (STP), designed to meet the water management needs of the campus while reducing its dependency on freshwater sources.

Key Specifications

- Capacity: 1 MLD (10,00,000 litres per day)
- Technology: Moving Bed Biofilm Reactor (MBBR) integrated with extended aeration and tertiary filtration for high treatment efficiency and consistent water quality.
- Construction Cost: ₹1.25 crore

Operational Performance

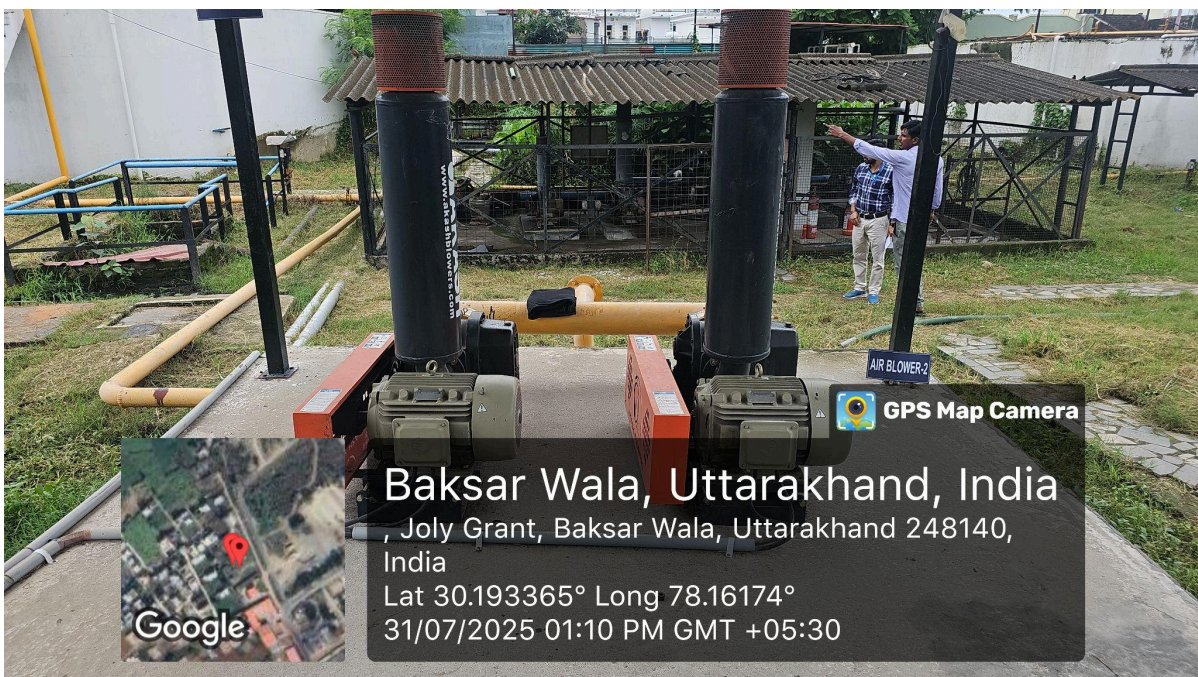
The STP treats an average of 7,00,000 litres of wastewater per day, effectively removing contaminants and producing high-quality treated water suitable for non-potable applications.



Sewage Treatment Plant (STP) with capacity of 1mld located at SRHU



Activated carbon and dual media filters in operation for advanced wastewater treatment



High-capacity air blowers in operation to support the aeration process



Aeration tanks in operation during wastewater treatment as part of environmental management efforts

Recycling and Reuse of Treated Water

Each year, approximately 9,43,153 litres of treated wastewater are repurposed for productive uses, including:

- Green Belt Irrigation: Supporting the upkeep of landscaped areas and gardens spanning 1,60,800 sqm, enhancing campus greenery and microclimate.
- Vehicle Washing: Providing a sustainable alternative to using freshwater for cleaning University transport and service vehicles.



Red-marked tap supplying treated wastewater from the sewage treatment plant, promoting sustainable water reuse for landscaping and greenery maintenance



Water flow meter monitoring system from water inlet and outlet



Recycling of water from STP aligning with Sustainable Development Goals

Water Quality Monitoring

Treated water quality is monitored twice a year at NABL-accredited laboratories. Recent test results confirm that the STP output is well within permissible norms, including:

- pH: 7.15
- BOD: 9 mg/L
- COD: 39.7 mg/L
- Fecal Coliform: 80 MPN/100ml



TEST REPORT

Format No. DARL/QF/50

Report Issue to: Swami Rama Himalayan University Swami Rama Nagar Doiwala Dehradun Uttarakhand - 248140.		ULR No.: TC51632500009746F	
Name of Sample STP Inlet water (1 MLD)		Report No. 820250626WT019	
Brand Name N.S.		Sample Receipt Date 26/06/2025	
Sample Quantity 1 Ltr		Test Started On 26/06/2025	
Sample Collected by Our lab Representative Mr. Rajan		Date of Completion 30/06/2025	
Sampling Method N.S.		Issue Date 30/06/2025	
Sample Description STP Inlet water (1 MLD)		Expiry Date Not Specified	

TEST RESULTS		Discipline : Chemical and Biological	
S.No.	Test Parameter	Unit	Result
1	pH	--	6.69
2	Total suspended solid(TSS)	mg/L	185.0
3	Biochemical oxygen demand (BOD) at 27°C for 3 days	mg/L	134.8
4	Chemical oxygen demand (COD)	mg/L	595.2
5	Oil and grease	mg/L	Less than 4
6	Microbiological Parameter	mg/L	-
7	Faecal coliform	MPN/100ml	<2

Remarks : Party asked for above test only.

End of Report

Page No. 1/1

Authorized Signatory (Chemical)
Mr. Manmohan Pandey

Note: 1. The results are related to the test items only. 2. Sample will be destroyed after one month from the date of issue of test report. 3. This report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law and should not be used in any advertisement media without written consent. 4. Laboratory is not responsible for customer provided details. 5. When report is without NABL Symbol & URL, it implies that these products & tests are not covered under NABL accredited scope.



TEST REPORT

Format No. DARL/QF/50

Report Issue to: Swami Rama Himalayan University Swami Rama Nagar Doiwala Dehradun Uttarakhand - 248140.		ULR No.: TC51632500009747F	
Name of Sample STP Outlet water (1 MLD)		Report No. 820250626WT020	
Brand Name N.S.		Sample Receipt Date 26/06/2025	
Sample Quantity 1 Ltr		Test Started On 26/06/2025	
Sample Collected by Our lab Representative Mr. Rajan		Date of Completion 30/06/2025	
Sampling Method N.S.		Issue Date 30/06/2025	
Sample Description STP Outlet water (1 MLD)		Expiry Date Not Specified	

TEST RESULTS		Discipline : Chemical and Biological	
S.No.	Test Parameter	Unit	Result
1	pH	--	7.15
2	Total suspended solid(TSS)	mg/L	18.0
3	Biochemical oxygen demand (BOD) at 27°C for 3 days	mg/L	9.0
4	Chemical oxygen demand (COD)	mg/L	39.7
5	Oil and grease	mg/L	Less than 4
6	Microbiological Parameter	mg/L	-
7	Faecal coliform	MPN/100ml	80

Remarks : The above tested sample complies as per C.P.C.B. Guideline with respect to above test only.

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Comparative analysis of influent and treated effluent parameters, highlighting the sewage treatment plant's performance in meeting environmental discharge standards

Regulatory Compliance

The wastewater management system fully complies with State Pollution Control Board regulations, ensuring adherence to all statutory environmental standards and discharge norms.

Effluent Treatment Plant (ETP)

In addition to managing domestic wastewater, SRHU operates a dedicated Effluent Treatment Plant (ETP) for the safe treatment of clinical and laboratory effluents generated from its hospital and research units. This facility ensures that hazardous wastewater is rendered safe for reuse, protecting both human health and the environment.

Capacity and Purpose

- Treatment Capacity: 90,000 litres per day
- Primary Function: Treatment of effluents from hospital operations, diagnostic laboratories, and research facilities to eliminate harmful contaminants before reuse or discharge.

Treatment Process Overview

The ETP incorporates a multi-stage treatment process to achieve high-quality output:

1. Equalization – Balances the flow and composition of incoming effluent.
2. Coagulation – Aggregates suspended particles for easier removal.
3. Neutralization – Adjusts pH to safe operating levels.
4. Aeration – Introduces oxygen to promote microbial degradation of contaminants.
5. Clarification – Removes settled solids and impurities.
6. Tertiary Treatment – Filtration through sand and activated carbon to remove fine particles, color, and residual organics.

Operational Features

- Continuous Aeration to maintain optimal biological activity.
- Regular Sludge Handling to ensure plant efficiency.
- Filter Backwashing every 4–8 hours to maintain filtration performance.

Sludge Disposal

All sludge generated is safely handled in partnership with M/S Bharat Oil & Waste Management Ltd, an agency approved by the Uttarakhand Environment Protection & Pollution Control Board (UEPPCB).

Monitoring and Compliance

- Daily Monitoring of operational parameters, including pH (7–8), chlorine residuals (1–2 mg/L), and equipment functionality.
- Adherence to state pollution control regulations and hospital waste management norms.



ETP at SRHU designed to treat and recycle wastewater from institutional activities, ensuring compliance with environmental norms



ETP at SRHU designed to treat and recycle wastewater from institutional activities, ensuring compliance with environmental norms

DELHI ANALYTICAL RESEARCH LABORATORY
Plot No. 2, (A-2) Timber Block, Jhilmil Industrial Area, Delhi-110095
E-mail : darltesting@gmail.com, www.darltesting.in
Ph. : 011-43545890, 09717324010, 9971520106, 8595224665.
(A GOVERNMENT APPROVED & ISO 9001:2015, ISO 45001:2018 Certified Testing Laboratory)

TEST REPORT Format No. DARL/QP/50

Report Issue to: Swami Rama Himalayan University, Swami Rama Nagar Doiwala Dehradun Uttarakhand - 248140.

ULR No.: TC81632500009748F
Report No.: 820250626W7022
Sample Receipt Date: 26/06/2025
Test Started On: 26/06/2025
Date of Completion: 30/06/2025
Issue Date: 30/06/2025

Name of Sample: ETP Inlet Water (40 KLD)
Brand Name: N.S.
Sample Quantity: 1 Ltr
Sample Collected by: Our lab Representative Mr. Rajan
Sampling Method: N.S.
Sample Description: ETP Inlet Water (40 KLD)

Date of Sampling: 26/06/2025
Batch/Lot No.: N.S.
Manufacturing Date: Not Specified
Expiry Date: Not Specified

TEST RESULTS
Group Name: Water
Discipline: Chemical and Biological

S.No.	Test Parameter	Unit	Result	Test Method
1	pH	-	7.03	IS : 3025(P-11):2022 Clause no. 9
2	Chemical oxygen demand	mg/L	168.7	IS : 3025(P-8):2023 Clause no. 9
3	Total suspended solid (TSS)	mg/L	130.0	IS : 3025(P-17):2022 Clause no. 6.1
4	Biochemical oxygen demand (BOD) at 27°C for 3 days	mg/L	33.5	IS : 3025(P-44):2023 Clause no. 9
5	Oil & Grease	mg/L	Less than 4	IS:3025(P-39):2023 Clause no. 9
6	Microbiological Parameter	-	-	-
7	Faecal coliform	MPN/100ml	<2	IS:1622:1981 Clause no. 3.3.3

Remarks : Party asked for above test only.

End of Report

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Plot No. 2, (A-2) Timber Block, Jhilmil Industrial Area, Delhi-110095
E-mail : darltesting@gmail.com, www.darltesting.in
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TEST REPORT Format No. DARL/QP/50

Report Issue to: Swami Rama Himalayan University, Swami Rama Nagar Doiwala Dehradun Uttarakhand - 248140.

ULR No.: TC81632500009748F
Report No.: 820250626W7023
Sample Receipt Date: 26/06/2025
Test Started On: 26/06/2025
Date of Completion: 30/06/2025
Issue Date: 30/06/2025

Name of Sample: ETP Outlet water (40 KLD)
Brand Name: N.S.
Sample Quantity: 1 Ltr
Sample Collected by: Our lab Representative Mr. Rajan
Sampling Method: N.S.
Sample Description: ETP Outlet water (40 KLD)

Date of Sampling: 26/06/2025
Batch/Lot No.: N.S.
Manufacturing Date: Not Specified
Expiry Date: Not Specified

TEST RESULTS
Group Name: Water
Discipline: Chemical and Biological

S.No.	Test Parameter	Unit	Result	Limit	Test Method
1	pH	-	6.98	5.5 to 9.0	IS : 3025(P-11):2022 Clause no. 9
2	Total suspended solid(TSS)	mg/L	76.0	100 Max	IS : 3025(P-17):2022 Clause no. 6.1
3	Biochemical oxygen demand (BOD) at 27°C for 3 days	mg/L	21.3	30 Max	IS : 3025(P-44):2023 Clause no. 9
4	Chemical oxygen demand (COD)	mg/L	69.4	250 Max	IS : 3025(P-58):2023 Clause no. 9
5	Oil and grease	mg/L	Less than 4	10 Max	IS:3025(P-39):2021 Clause no. 5.5
6	Microbiological Parameter	-	-	-	-
7	Faecal coliform	MPN/100ml	70	-	IS:1622:1981 Clause 3.3.3

Remarks : The above tested sample complies as per C.P.C.B. Guideline with respect to above test only.

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Routine Testing report of ETP inlet and outlet

4. Water-Saving Sanitation Features

In addition to its robust wastewater treatment and rainwater harvesting systems, Swami Rama Himalayan University (SRHU) has implemented a range of innovative, low-cost, and high-impact measures to reduce freshwater consumption across its academic, residential, and clinical zones. These measures combine technology, reuse strategies, and community engagement to achieve significant and measurable water savings.

Waterless Sanitation Solutions

- SRHU has installed over 150 waterless urinals across the campus, significantly reducing the need for flushing. Each unit saves approximately 1.5 lakh litres of water annually, leading to a total annual saving of around 2.25 crore litres. These fixtures are strategically located across various campus facilities, ensuring both convenience and maximum impact.



Waterless urinals present at different locations across the University

Reuse of Condensed AC Water

- Condensate water generated by air conditioning systems is systematically collected and repurposed for non-potable uses. This practice saves approximately 1.2 lakh litres of water annually, transforming what is typically wasted into a valuable resource for the University's sustainability efforts.



Condensated water from AC Units placed across the campus with an aim to repurpose and recycle water

Recycling of RO Reject Water

- Reject water from Reverse Osmosis (RO) units, often discarded in conventional setups, is now reused for toilet flushing and laundry operations. This initiative contributes to annual savings of approximately 32.85 lakh litres of water and reduces the environmental footprint of water purification processes.

Sensor-Based Scrub Stations

- In its Operation Theatres (OTs), SRHU has deployed sensor-activated scrub stations that control water flow only when needed, minimizing wastage during hand scrubbing procedures. This smart technology saves approximately 5 lakh litres of water per year while maintaining strict hygiene standards.



Sensor activated scrub station aiding in water conservation

5. Community Outreach and Training

Beyond managing water resources within its campus, Swami Rama Himalayan University (SRHU) plays an active role in advancing regional water sustainability. The University works closely with rural communities, government bodies, and partner organizations to enhance water access, improve storage infrastructure, and build local capacities for long-term water management.

A key component of this outreach is the construction of water conservation tanks in remote villages, enabling communities to store and manage water effectively in regions prone to scarcity. Alongside infrastructure development, SRHU conducts structured training programs to strengthen the skills of water sector stakeholders from across India.

Impact Highlights

- Villages supported with clean water infrastructure: 550+
- Water conservation tanks constructed: 600+ units, each with a 7,000-litre storage capacity
- Stakeholders trained under national water management programs: 7,787
- Core focus areas: Aquifer recharge, greywater management, and spring restoration
- Educational integration: Hands-on environmental education is embedded into undergraduate curricula through guided visits to the campus Sewage Treatment Plant (STP), providing students with practical exposure to sustainable water management practices.

Through these combined interventions, SRHU not only addresses immediate water access challenges but also fosters long-term community ownership of water resources, ensuring lasting environmental and public health benefits.



States/UTs Outreached

- | | |
|----------------------|-------------------|
| 1. Andaman & Nicobar | 17. Maharashtra |
| 2. Andhra Pradesh | 18. Manipur |
| 3. Arunachal Pradesh | 19. Meghalaya |
| 4. Assam | 20. Mizoram |
| 5. Bihar | 21. Nagaland |
| 6. DNH & DD | 22. Odisha |
| 7. Goa | 23. Puducherry |
| 8. Gujarat | 24. Punjab |
| 9. Himachal Pradesh | 25. Rajasthan |
| 10. Jammu & Kashmir | 26. Sikkim |
| 11. Jharkhand | 27. Tamil Nadu |
| 12. Karnataka | 28. Tripura |
| 13. Kerala | 29. Uttar Pradesh |
| 14. Ladakh | 30. Uttarakhand |
| 15. Lakshadweep | 31. West Bengal |
| 16. Madhya Pradesh | |

States and Union territories covered by WATSAN, SRHU supporting SDG 6

Recent work of SRHU on the Direct Injection Recharge Model in the villages of Gairsain (Chamoli district), supported by the Institute of Innovation, Policy Studies & Rural Transformation (IIPSRT), established by the Uttarakhand Legislative Assembly. This approach repurposes defunct handpumps to channel rainwater directly into underground aquifers, helping revive groundwater tables and ensuring sustained handpump use. This initiative marks a promising step toward water conservation and spring revival in the Himalayan hill regions.



SRHU team with community members in Gairsain, Chamoli, implementing the Direct Injection Recharge Model to revive groundwater through repurposed handpumps ([For more information](#))

As part of a 40-day awareness and action campaign, the WATSAN team of SRHU conducted a series of impactful activities in Pasta village, Vikasnagar, Dehradun. These included:

- Plantation drives to enhance green cover and support local ecology.
- Water quality testing and chlorination to ensure safe drinking water.
- Sanitation surveys to assess and improve hygiene infrastructure.
- Health awareness sessions on diarrhea prevention and safe hygiene practices.

The engagement built on SRHU's earlier interventions in the village, including the construction of a Water Supply Scheme under the Sector Program (2010–2011) and the Jal Jeevan Mission (2021–2023)



Promoting safe water practices – SRHU's WATSAN team testing village water sources during RDI Foundation Day activities

6. Environmental and Social Audit under the Namami Gange Programme

Swami Rama Himalayan University (SRHU) has been engaged as a key evaluator in the Government of India's Namami Gange Programme—a flagship initiative launched in 2014 to address the escalating pollution levels in the Ganga River. The Ganga, revered for its ecological, cultural, and economic importance, has long faced mounting pressures from unregulated urban growth, industrial effluents, and inadequate waste management infrastructure.

To combat these threats, the program has prioritized the establishment of Sewage Treatment Plants (STPs) and Interception & Diversion (I&D) systems, which are critical for reducing untreated wastewater discharge into the river.

Under the mandate of the State Mission for Clean Ganga (SMCG), Government of Uttarakhand, SRHU has been entrusted with conducting comprehensive Environmental and Social Audits of STPs and I&D facilities across nine locations in the districts of Haridwar, Tehri, Dehradun, and Nainital.

These audits serve to:

- Evaluate the environmental performance of the infrastructure.
- Assess the social impacts at the community level.
- Ensure alignment with sustainability standards and regulatory compliance frameworks.

Through this role, SRHU contributes not only to pollution abatement in the Ganga but also to strengthening governance, accountability, and long-term ecological restoration efforts.

Districts Covered: **Haridwar, Tehri, Dehradun, and Nainital**



STP under Namami Gange Initiative



STP monitoring and Audit under Namami Gange



Sensitization of masses on important of clean water under Namami Gange

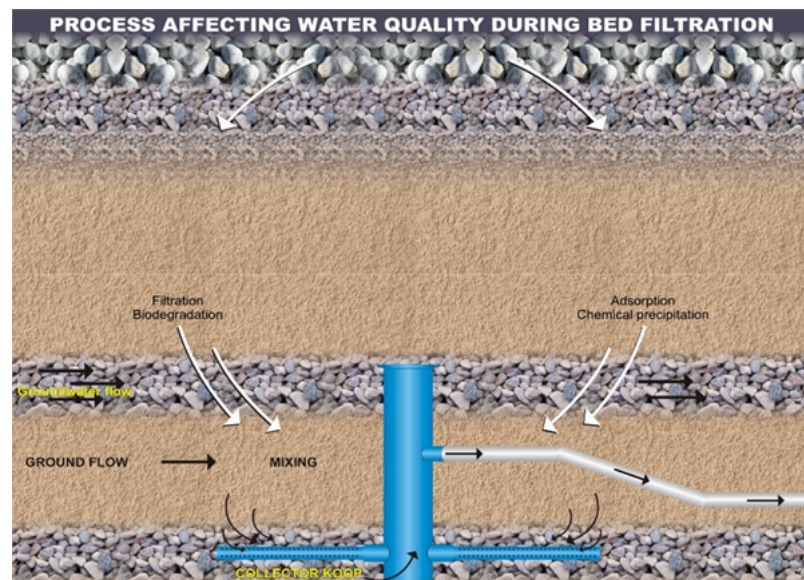
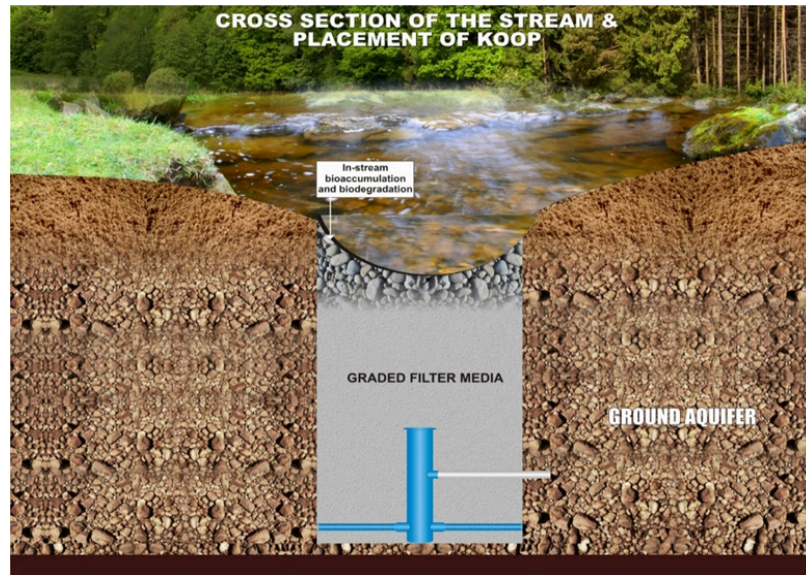
Innovation and Policy Integration

As part of its commitment to sustainable development and water security, Swami Rama Himalayan University (SRHU) has initiated a research project titled “Affordable Climate-resilient Water Supply Infrastructure for the Indian Himalayan Region.” This initiative aims to address the acute challenges of water scarcity, inaccessibility, and climate vulnerability faced by indigenous mountain communities. The project focuses on designing and developing a low-cost, climate-resilient, and prefabricated source tapping and filtration system, piloted in a selected mountain village with the intent to scale up across similarly vulnerable geographies.

Key Outcomes

- **Reliable Potable Water Access:** The pilot will ensure year-round availability of clean and safe drinking water, particularly in remote and high-altitude areas where conventional water systems are often unviable.
- **Health and Economic Benefits:** Reduced incidence of waterborne diseases will contribute to **lower healthcare costs** and improved community well-being.
- **Environmental Sustainability:** By employing context-appropriate, low-impact solutions, the system minimizes ecological disturbances in **environmentally sensitive Himalayan terrain**.
- **Community Empowerment:** The project includes training modules to equip local communities with the **knowledge and skills to operate and maintain** the system, fostering ownership and long-term sustainability.

This research-based intervention not only supports the national mission of “Har Ghar Jal” but also strengthens India’s progress toward achieving SDG 6 targets by ensuring equitable access to safe and affordable drinking water for vulnerable populations.



Design Drawing for low-cost, climate-resilient, and prefabricated source tapping and filtration system developed by WATSAN



Water being collected post installation of low cost underground water filtration