Community Education and Capacity Building for Sustainable Water Management

JSS Academy of Higher Education and Research (JSSAHER) is conducting educational and outreach programs on water and sanitation, water conservation and management for community development. JSSAHER has started the Department of Water and Health exclusively for social orientation and water resource conservation. JSSAHER has conducted many education and awareness programs regularly to promote awareness regarding water conservations on campus.

As part of JSS Academy of Higher Education and Research's ongoing commitment to sustainability, water conservation flyers and signages have been published and displayed across the campus. These materials are designed to increase awareness and promote responsible water use among students, faculty, staff, and visitors.

The flyers, distributed in key locations, provide practical guidance on reducing water consumption, such as turning off taps, reporting leaks, and using water-efficient practices in day-to-day activities. The signages, strategically placed in high-traffic areas like classrooms, dining halls, restrooms, and administrative offices, serve as visual reminders encouraging the JSSAHER community to adopt water-saving habits. Beyond offering tips on individual action, the flyers also highlight larger initiatives like rainwater harvesting and the importance of sustainable water management practices for long-term environmental health. These efforts align with JSSAHER's broader commitment to ecofriendly practices and responsible resource management, reflecting its role as an educational institution striving to lead by example in sustainability. By consistently reinforcing water conservation messages through these flyers and signages, JSSAHER aims to create a culture of environmental stewardship, encouraging the entire campus community to contribute toward preserving vital water resources and promoting a sustainable future.

Educational Opportunities for Local Communities on Good Water Management JSS AHER actively engages local communities through various educational programs and outreach initiatives aimed at promoting good water management practices.

- The Department of Water and Health has been established exclusively to promote water resource conservation and social orientation.
- Community programs such as the Cauvery River Cleaning Drive and activities under the Swachhata Savaari campaign address critical issues like water pollution, raising awareness about preserving water resources.
- Through partnerships with organizations like the Environmental Management and Policy Research Institute (EMPRI) and the Centre for Environmental Education (CEE), JSS AHER has conducted programs like nature walks, awareness campaigns, and workshops, directly involving students, local residents, and municipal authorities in water conservation education.

• These initiatives include psychological and behavioral change interventions to inspire sustainable water usage habits.

Swachhata Hi Seva: Community Education on Cleanliness and Water Protection (09 October 2024)

JSS Academy of Higher Education & Research (JSS AHER), through its National Service Scheme (NSS) unit, actively engages both students and the surrounding local community in educational initiatives focused on environmental hygiene and responsible water management. As part of the *Swachhata Hi Seva* campaign held on 9th October 2024, a cleanliness and awareness drive was conducted at the JSS Medical College and adjoining hostel and residential areas, with a strong focus on preventing water pollution and promoting sustainable waste practices.

The programme began at 6:30 AM with the enthusiastic participation of student volunteers, supported and guided by faculty coordinators Dr. Manu G, Mr. Manjunath, and Mr. Venkatesh. The students worked in groups to clean public and semi-public spaces within and surrounding the campus, including drainage lines, pathways, and open areas, removing plastic waste, wrappers, and other non-biodegradable materials that otherwise pose a serious risk of contaminating surface and groundwater sources.

Alongside the physical clean-up, the activity also functioned as a **practical learning platform for the local community**. Residents, hostel users, and passers-by were sensitised to the dangers of improper waste disposal, especially its impact on water bodies, stormwater drains, and groundwater recharge systems. The students educated community members on:

- The relationship between solid waste dumping and water pollution
- The importance of keeping drains and water channels free from waste
- Simple household practices to protect local water sources
- The role of individuals in maintaining clean and safe water environments

The drive concluded with an interactive reflection and awareness session, where students discussed how small, consistent actions can help protect water resources. The initiative reinforced the connection between cleanliness, safe water, and public health and encouraged the community to adopt better waste handling and water conservation behaviours.

Through such outreach programmes, JSS AHER not only trains its students in environmental responsibility but also extends practical water management education to the local community, directly contributing to long-term environmental sustainability and public awareness in line with national initiatives such as Swachh Bharat Abhiyan and Jal Shakti Abhiyan.



NSS – Swachh Bharat Abhiyan 2025 – Educational Outreach on Water Conservation & Hygiene (04-03-2025)

As part of its continuous commitment to environmental sustainability and community education, JSS Medical College, through its NSS unit, organized a Swachh Bharat Abhiyan on 4th March 2025 with a focus on promoting awareness related to hygiene, waste management, and the protection of local water resources.

A total of 55 student volunteers actively participated in the programme, which commenced at 7:30 AM. The initiative aimed not only at cleaning public and campus surroundings, but also at sensitising students and the local community on the impact of improper waste disposal on water bodies, drainage systems, and groundwater quality.

During the drive, students collected large quantities of plastic waste, wrappers, and other non-biodegradable litter from the surrounding areas. The activity served as a practical learning experience, emphasising how solid waste, when left unmanaged, can pollute nearby water sources and disrupt natural water flow systems. Discussions were also held with local residents and campus users on the importance of preventing waste from entering drains and water channels.

The collected waste was responsibly handed over to the Mysuru City Corporation for scientific disposal. Through this initiative, the institution reinforced the significance of collective responsibility in protecting water resources and promoting sustainable water management practices at the community level.

This programme stands as a clear example of how JSS AHER actively provides educational opportunities and real-world exposure to students and local communities in support of effective and sustainable water management.



Swachhatha Sarvekshan 2024 – Community Engagement on Water Body Protection at Kukkarahalli Lake (16-02-2025)

JSS Medical College, through its NSS wing, actively participated in the Swachhatha Sarvekshan 2024 initiative conducted by the Mysuru City Corporation at Kukkarahalli Lake on 16th February 2025. The programme commenced at 7:00 AM from Kuvempu Vana, Railway Front Gate, Mysuru, with enthusiastic participation from 25 student volunteers, including MBBS and BSc students.

This activity was specifically aimed at raising awareness about the protection and sustainable management of local water bodies. Students took part in cleaning the lake surroundings by collecting plastic waste, wrappers, and other debris that pose a serious threat to surface water quality, aquatic life, and overall ecosystem health.

In addition to the clean-up activity, the volunteers interacted with members of the public and morning walkers, educating them on the importance of keeping water bodies free from solid waste, preventing litter from entering stormwater drains, and the role of individual responsibility in safeguarding natural water resources.

This hands-on engagement served as a practical educational platform for both students and the local community, reinforcing key messages on water conservation, pollution prevention, and sustainable environmental practices. The initiative strengthened awareness and encouraged community participation in protecting Kukkarahalli Lake as a vital urban water resource.



Community Awareness Programme on Dengue Prevention and Water Management – 23-07-2024 (JSS Urban Health Centre)

JSS Medical College, in collaboration with JSS Jan Shikshan Sansthan and the JSS Urban Health Centre (Department of Community Medicine), organized a community awareness programme on 23rd July 2024 focusing on dengue and malaria prevention as part of the Swachhata Pakhwada initiative. The programme highlighted the direct connection between stagnant water, poor sanitation, and the spread of vector-borne diseases.

The session covered key topics such as the causes and modes of transmission of dengue and malaria, with a strong emphasis on household and community-level water management practices. Participants were educated on the importance of eliminating stagnant water in open containers, overhead tanks, coolers, discarded tyres, and clogged drains to prevent mosquito breeding. Practical demonstrations and guidance were provided on maintaining clean water storage, ensuring proper drainage, and adopting safe waste disposal practices.

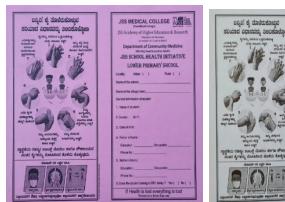
The programme was inaugurated by Chief Guest Sri Nagaraju, Subject Expert from the School Education Department, JSS Mahavidyapeetha, in the presence of Sri Ramesh, Director, JSS Jan Shikshan Sansthan, and other dignitaries. The session was attended by JSS Medical and Dental interns, staff of JSS Jan Shikshan Sansthan, JSS Urban Health Centre personnel, and around 30 women beneficiaries from the local community.

Through this initiative, JSS AHER provided a vital educational platform for local residents to understand the role of effective water management in disease prevention, environmental hygiene, and community well-being.

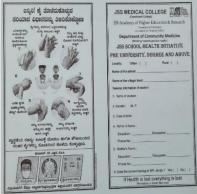


School Health Appraisal program

- Every year around 12,000-15,000 school and college students' health appraisal is conducted by the Department of Community Medicine, JSS Medical College. During this appraisal program, there are separate health cards for primary school, middle and high school, and college students. These health cards also depict the pictorial message about hand washing techniques and personal hygiene methods.
- The students are also educated about personal hygiene, menstrual hygiene, and environmental hygiene (school & domestic).







Handwashing picture is depicted in School Health Appraisal cards

 In the schools along with health check up, children were educated about hand washing technique and importance of hand hygiene.

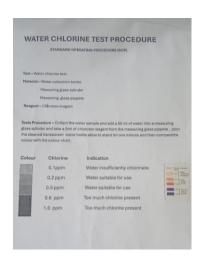
Educational Initiatives on Water Safety and Management by JSS Academy of Higher Education & Research

JSS Academy of Higher Education & Research (JSS AHER) actively creates educational opportunities for both its students and the surrounding community to promote good water management and safe hygiene practices.

The Medical Education Unit of JSS Medical College conducted a Foundation Course for first-year MBBS students of the 2024–25 batch from 14th to 26th October 2024, in accordance with National Medical Commission guidelines. As part of this course, students were sensitized to critical topics such as patient safety, biohazard management, safe handling of biomedical waste, and the importance of water hygiene. Sessions on hand hygiene and infection prevention emphasized the role of clean and safe water in preventing hospital-acquired and community infections. These students, in turn, serve as change agents, carrying this knowledge into the community during their field postings, outreach activities, and awareness programmes.

In addition, the Department of Community Medicine at JSS Medical College has established and implemented a **Standard Operating Procedure (SOP)** for water quality testing and chlorination monitoring. Water samples from hostels, guest houses, and other institutional facilities are regularly tested for adequate chlorine levels. When deficiencies are identified, immediate corrective measures are taken, ensuring access to safe water. The process also serves as a demonstration and training model for students, interns and community health workers, who are educated on the importance of water testing, chlorination, and safe water supply management.

Through these academic and practical initiatives, JSS AHER strengthens awareness and capacity in water safety and management, benefitting not only its internal community but also the wider population through outreach and field-based health education activities.



Community Education on Water Safety during Disease Outbreaks

The Department of Community Medicine at JSS Academy of Higher Education & Research developed and disseminated targeted health education material on staying safe during cholera outbreaks, a water-borne disease directly linked to unsafe drinking water and poor sanitation. These materials emphasized key messages such as the importance of using clean and treated water, safe storage of drinking water, hand hygiene, and proper sanitation practices.

The educational content was prominently displayed at the JSS Hostel premises, where large numbers of students and local residents frequently visit, thereby extending its impact beyond the campus. This initiative served as an awareness tool for both students and the surrounding community, reinforcing best practices in water safety and hygiene. Through such evidence-based educational campaigns, JSS AHER actively empowers local communities with knowledge and practical guidance on safe water usage and disease prevention, contributing to improved public health and sustainable water management.



Community-Based Learning through Water Sanitation Monitoring and Demonstrations

The Department of Community Medicine at JSS Academy of Higher Education & Research conducts regular water sanitation assessments across the hospital, college, and hostel premises, including the monitoring of chlorination levels and overall water safety. These activities are integrated into teaching and outreach programs, where students and community members are actively engaged in observing and understanding scientifically approved water treatment practices.

The institution has well-established water disinfection and RO purification facilities, and water is treated using Sodium Hypochlorite (12% strength). During routine inspections and training sessions, the Community Medicine team uses these systems as live demonstration sites, educating students, support staff, and visitors from the nearby community on the importance of proper chlorination, disinfection, and safe water handling methods.

Through this hands-on exposure and awareness initiatives, JSS AHER strengthens community knowledge on effective water sanitation practices, thereby promoting public health and sustainable water management beyond the campus boundaries.





Chlorination Pump Inspection of process of chlorination and functioning of the pump

Advancing Community Awareness through Field-Based Learning on Sewage and Water Management

JSS Academy of Higher Education & Research provides experiential learning opportunities that extend beyond the classroom to strengthen awareness on good water management practices among students and the local community. On 30th May 2025, second-semester Master of Public Health (MPH) students from the School of Public Health, JSS Medical College undertook an educational visit to the Sewage Treatment Plant (STP), Mysuru.

This field exposure enhanced participants' understanding of the complete wastewater treatment cycle—from preliminary screening and aeration to sedimentation and final disposal. Students learned about the use of automated technologies and aerators used to manage approximately 67.65 MLD of wastewater daily and observed how treated water is recycled for landscape irrigation in public spaces.

Importantly, the visit also served as a platform to understand the role of safe wastewater management in protecting community health, preventing water-borne diseases, and promoting sustainable reuse of water resources. Insights gained during the visit are further shared through classroom discussions, community outreach programmes, and awareness sessions, thereby extending the benefits of this learning to the wider local community.

Through such initiatives, JSS AHER actively promotes responsible water use, environmental stewardship, and public education on sustainable water management systems.





Promoting Awareness on Safe Water Management through Academic-Community Exposure Visits

JSS Academy of Higher Education & Research actively provides educational opportunities that strengthen understanding of safe and sustainable water management among students who, in turn, extend this knowledge to the wider community. As part of this effort, the second-semester Master of Public Health (MPH) students from the School of Public Health, JSS Medical College undertook an academic field visit to the **Vani Vilas Water Treatment Plant, Mysuru on 29th May 2025**, as part of their Environmental Health curriculum.

During the visit, students gained first-hand understanding of critical water management processes including:

- Advanced water purification and filtration techniques
- Chlorination and disinfection procedures to prevent water-borne diseases
- Water sampling and quality monitoring protocols
- Operation of rapid sand filters and backwashing mechanisms
- Large-scale water storage and distribution systems

This experiential learning not only strengthened students' technical knowledge of public health engineering, but also enabled them to appreciate the importance of safe drinking water in safeguarding community health. The learning outcomes from the visit are further disseminated through community education sessions, awareness campaigns, and academic projects carried out by students in nearby urban and rural areas.

Through such structured field-based learning initiatives, JSS AHER plays an important role in promoting good water management practices and fostering a culture of water conservation and safety within the local community.





Strengthening Community Awareness on Water and Sanitation through Field-Based Learning

JSS Academy of Higher Education & Research actively promotes education on good water management practices by engaging students in structured field-based learning activities that are later translated into community awareness initiatives. As part of this effort, a field visit was organized on 19th July 2024 for second-semester students of the School of Public Health to the Sewage Treatment Plant, Mysuru.

The visit provided students with in-depth, practical exposure to the stages of sewage treatment and the effective removal of biological, chemical and physical

contaminants from wastewater. Students observed each stage of treatment and gained an understanding of how these processes contribute to environmental protection and the prevention of water-borne diseases, thereby reinforcing the importance of universal access to safe water and proper sanitation as a core public health principle.

In addition, the students were introduced to the plant's **compliance with public health regulations and national environmental standards**, highlighting the role of policy and governance in maintaining safe water systems. The visit was further extended to a **nearby solid waste management facility**, where students learned about **sanitary landfill practices and scientific composting methods** used to prevent land and water contamination.

The knowledge gained through this visit is disseminated through student-led awareness programmes, community outreach activities, and public health education sessions conducted in surrounding areas, thereby contributing to improved community understanding of responsible wastewater management and environmental hygiene.



Promoting Community Awareness on Safe Water Management through Field-Based Learning

As part of its commitment to improving water literacy and promoting sustainable water practices within the community, JSS Academy of Higher Education & Research organised a field visit to the Vani Vilas Water Works, Mysuru, on 18th July 2024 for second-semester students of the School of Public Health.

The visit provided students with in-depth exposure to water treatment processes, purification techniques, quality monitoring methods and water distribution mechanisms that are essential for ensuring the supply of safe and potable water. The crucial role played by the Vani Vilas Water Treatment Plant in providing clean drinking water to the residents of Mysuru was also highlighted.

This hands-on learning experience enabled students to connect theoretical concepts in **Public Health and Environmental Engineering** with real-life practices. The insights gained are further disseminated through **student-led awareness programmes, community interactions, and educational outreach sessions**, encouraging local

communities to understand the importance of water conservation, safe storage, and responsible water usage.

Through such initiatives, JSS AHER not only strengthens academic learning but also actively contributes to **building informed and water-responsible communities**.





Community educational and outreach programs on water resource conservation, pollution control and management by JSSAHER, Mysuru











Community educational on water conservation and sanitation by JSSAHER, Mysuru



Signage boards and displays for conservation of water at JSSAHER, Mysuru

Commitment to Water Conservation and Management

1. Educational Opportunities for Local Communities on Good Water Management

JSS AHER actively engages local communities through various educational programs and outreach initiatives aimed at promoting good water management practices.

- The **Department of Water and Health** has been established exclusively to promote water resource conservation and social orientation.
- Community programs such as the **Cauvery River Cleaning Drive** and activities under the **Swachhata Savaari campaign** address critical issues like water pollution, raising awareness about preserving water resources.
- Through partnerships with organizations like the Environmental Management and Policy Research Institute (EMPRI) and the Centre for Environmental Education (CEE), JSS AHER has conducted programs like nature walks, awareness campaigns, and workshops, directly involving students, local residents, and municipal authorities in water conservation education.
- These initiatives include psychological and behavioral change interventions to inspire sustainable water usage habits.

Department of Water & Health: https://jssuni.edu.in/jssaher/faculty-of-natural-sciences/

2. Support for Water Conservation Off Campus

JSS AHER demonstrates a strong commitment to off-campus water conservation through multiple initiatives:

- Regular cleaning drives at critical water bodies like the Cauvery River, in collaboration with local communities, government bodies, and environmental organizations.
- Adoption of nearby lakes, ponds, and villages through National Service Scheme (NSS) and environmental programs, involving activities like restoration drives and awareness campaigns to preserve these resources.
- Collaboration with the Karnataka State Pollution Control Board (KSPCB) for water conservation programs and community education efforts.

3. Utilization of Sustainable Water Extraction Technologies

JSS AHER integrates sustainable water extraction technologies on its associated university grounds:

- The university emphasizes rainwater harvesting systems to sustainably manage water needs on campus.
- Water extraction and utilization practices are carefully monitored to ensure minimal environmental impact, and related initiatives are extended to off-campus projects, particularly in adopted villages and lakes.

4. Cooperation with Local, Regional, National, and Global Governments on Water Security

JSS AHER collaborates extensively with governmental and international organizations for water security and sustainable management:

- **Local Collaborations:** Partnerships with municipal administrations ensure the supply of safe drinking water and improved sanitation for the local population.
- National Collaborations: Joint initiatives with EMPRI under the Swachhata Savaari campaign and alignment with the LiFE Mission promote water conservation and sustainable lifestyles.
- Global Collaborations: JSS AHER works with organizations like the Scientific Committee on Problems of the Environment (SCOPE), Netherlands, and the Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) to enhance research and technological advancements in water resource management.

5. Promotion of Conscious Water Usage on Campus

On-campus initiatives at JSS AHER aim to foster a culture of conscious water usage:

- Educational materials, including **flyers and signages**, are displayed across the campus in high-traffic areas to encourage responsible water use among students, staff, and visitors.
- Campaigns highlight simple yet impactful actions like reporting leaks, turning off taps, and adopting water-efficient practices in daily routines.
- Institutional practices like rainwater harvesting and efficient wastewater management set an example for sustainable water use.

6. Promotion of Conscious Water Usage in the Wider Community

JSS AHER actively extends water conservation efforts to the broader community:

- Community outreach programs under NSS and environmental initiatives include water conservation awareness campaigns and practical demonstrations in nearby villages.
- Collaborative efforts with organizations such as the Centre for Environmental Education (CEE) and UNICEF facilitate workshops and orientation programs focused on water resource sustainability for students and local residents.
- By organizing hands-on activities and engaging local communities in the **Cauvery River Cleaning Drive**, JSS AHER ensures that the importance of water conservation reaches diverse audiences, fostering long-term behavioral change.

Conclusion

JSS Academy of Higher Education and Research embodies its commitment to water conservation and management through comprehensive educational, technological, and collaborative efforts. Its on-campus practices, community engagement, and partnerships at various levels ensure a sustainable and impactful approach to preserving water resources, aligning with its broader mission of environmental stewardship and social responsibility.