

## WATER CONSERVATION REPORT





## **INTRODUCTION (Water Conservation)**

Saraswati College of Pharmacy is committed to promoting responsible water management and ensuring the sustainable use of water resources within the campus. Water is a vital natural resource that supports academic activities, sanitation, landscaping, and the overall functioning of the institution. Recognizing the growing concerns related to water scarcity, groundwater depletion, and climate variability, the college emphasizes the need for efficient water conservation practices and sustainable resource management.

Water conservation is an essential component of environmental sustainability and institutional responsibility. Educational institutions play a crucial role in encouraging responsible water usage by implementing efficient infrastructure, adopting water-saving technologies, and promoting awareness among students, faculty, and staff. By integrating conservation measures such as rainwater harvesting, wastewater treatment and reuse, leak detection systems, and water-efficient fixtures, the institution aims to minimize water wastage and ensure optimal utilization of available resources.

Aligned with the principles of environmental stewardship and sustainable campus development, this policy focuses on strengthening water management practices through infrastructure development, regular monitoring, maintenance systems, and community participation. It also encourages awareness programs and student involvement to promote responsible water consumption and conservation habits across the campus.

Through this **Water Conservation Policy**, Saraswati College of Pharmacy strives to create a campus culture that values efficient water use, environmental protection, and long-term resource sustainability.

To maintain a clean, green, pollution-free, and safe campus environment that supports the overall well-being of students and staff.

A clean and green campus with landscaped gardens, trees, and open green spaces helps create a peaceful and healthy learning environment for students and staff. Green landscaping improves air quality, reduces pollution, and provides a comfortable atmosphere that supports academic productivity and mental well-being.



Safe pedestrian pathways, shaded walkways, and well-maintained surroundings contribute to a pollution-free and secure campus atmosphere. Such infrastructure encourages walking, promotes physical activity, and ensures safe mobility for students, faculty, and visitors while maintaining environmental sustainability



### **Objectives of Water Conservation**

- Promote efficient use of water across the campus
- Reduce water wastage through monitoring and maintenance
- Encourage rainwater harvesting and groundwater recharge
- Reuse treated wastewater for gardening and sanitation
- Create awareness among students and staff about water conservation

### **Water Saving Faucet Aerators**

Saraswati College of Pharmacy has adopted water-efficient technologies to promote responsible water consumption within the campus. One such initiative is the installation of **water-saving faucet aerators** in washbasins and sink taps across the institution.

Water Saving Faucet Aerators are innovative devices that help reduce the amount of water flowing from faucets while maintaining adequate water pressure for effective use. These aerators mix air with the water stream and regulate the flow rate, thereby minimizing unnecessary water wastage.

The aerators installed in the campus are designed to dispense water at controlled flow rates, typically ranging from **2 to 8 liters per minute**. These devices are compatible with standard faucets and can easily be fitted without major modifications to the existing plumbing infrastructure.

The installation of faucet aerators provides several benefits to the institution:

- Significant reduction in water consumption, saving up to **80% of water** in certain usage areas.
- Easy installation and maintenance without requiring major plumbing changes.
- Conversion of conventional taps into **water-efficient fixtures**, thereby supporting sustainable campus practices.
- Contribution to the institution's overall **water conservation strategy and environmental sustainability goals**.

Through the installation of water-saving faucet aerators, Saraswati College of Pharmacy demonstrates its commitment to **efficient resource management and sustainable water use within the campus environment**.



## Wastewater Treatment and Reuse

NH 05, Chandigarh - Ludhiana Road, Gharuan, Mohali - 140413, Punjab, India

Wastewater generated in the campus is treated and reused for non-potable purposes.

Key Practices:

- **Functional Sewage Treatment Plant (STP)**

A **Functional Sewage Treatment Plant (STP)** is an essential component of sustainable campus infrastructure. It ensures that wastewater generated from institutional activities such as laboratories, hostels, washrooms, and cafeterias is properly treated before disposal or reuse. By treating sewage effectively, the institution prevents environmental pollution and promotes responsible water management.

At **Saraswati College of Pharmacy**, the Sewage Treatment Plant is designed to treat wastewater through a systematic process that includes primary, secondary, and tertiary treatment stages. In the primary stage, solid waste and suspended particles are removed through screening and sedimentation



### **Treated Water Used for Gardening and Landscaping**

- Treated wastewater from the **Sewage Treatment Plant (STP)** is reused for **irrigating gardens, lawns, and green belts** within the campus of Saraswati College of Pharmacy.
- The reuse of treated water helps in **reducing dependence on freshwater sources such as groundwater and municipal supply.**

NH 05, Chandigarh - Ludhiana Road, Gharuan, Mohali - 140413, Punjab, India

- This practice supports the **maintenance of greenery and landscaping** across the campus in an environmentally responsible manner.
- The treated water is supplied through a **dedicated pipeline or irrigation system** to ensure efficient and controlled usage.



### **Water Conservation through Efficient Sanitary Fixtures**

- The institution has installed **water-efficient sanitary fixtures** in washrooms to reduce unnecessary water consumption.

- Urinals are fitted with **controlled water outlets and efficient plumbing systems**, which help regulate the amount of water used during flushing.
- The design of the fixture ensures **minimum water usage while maintaining proper hygiene and sanitation**.
- Such installations help in **preventing water wastage and improving water use efficiency** across the campus.
- Regular maintenance and inspection of washroom fittings are conducted to **detect and repair leakages promptly**, ensuring optimal water conservation.
- The use of water-efficient sanitary infrastructure reflects the institution's commitment to **sustainable campus management and environmental responsibility**.
- These initiatives contribute to the institution's alignment with **Sustainable**



## Reduction in Freshwater Consumption

NH 05, Chandigarh - Ludhiana Road, Gharuan, Mohali - 140413, Punjab, India

- The institution implements various **water conservation practices** to minimize the use of freshwater resources.
- Treated wastewater from the **Sewage Treatment Plant (STP)** is reused for **gardening, landscaping, and flushing**, which significantly reduces the demand for fresh water at Saraswati College of Pharmacy.
- Installation of **water-efficient sanitary fixtures and controlled flushing systems** in washrooms helps reduce unnecessary water usage.
- Regular **monitoring of water supply systems and prompt repair of leakages** prevents wastage and ensures efficient utilization of water.
- Awareness programs and student participation encourage the campus community to **use water responsibly and adopt water-saving habits**.



### **Leakage Detection and Maintenance**

The institution has established a monitoring system to prevent water loss.

Key Activities:

### **Regular Inspection of Pipelines and Storage Tanks**

- The institution conducts **periodic inspection of water pipelines and storage tanks** to ensure the smooth and efficient distribution of water across the campus of Saraswati College of Pharmacy.
- Regular monitoring helps in the **early detection of leakages, cracks, or blockages**, preventing unnecessary water loss.
- Storage tanks are **cleaned and maintained at scheduled intervals** to ensure safe and hygienic water storage.
- Maintenance staff carry out **routine checks of valves, joints, and connections** to maintain the integrity of the water supply system.
- Immediate repair and replacement of **damaged pipelines or fittings** are undertaken to avoid water wastage.
- Proper inspection ensures **continuous water availability and efficient water management** within the campus.



### Immediate Repair of Leakages

- The institution has established a **system for the prompt identification and repair of water leakages** to prevent unnecessary wastage of water.
- Maintenance staff regularly monitor **pipelines, taps, valves, and storage tanks** to detect any signs of leakage at an early stage.
- Once a leakage is identified, **immediate corrective action** is taken to repair or replace the damaged component.

- Quick repair of leaks helps in **conserving water resources and maintaining efficient water supply** across the campus of Saraswati College of Pharmacy.
- Preventive maintenance practices are followed to **reduce the chances of recurring leakages in the water distribution system**.
- Routine inspections are conducted to ensure that **all plumbing fixtures are functioning properly without water loss**.
- The institution encourages staff and students to **report any observed water leakage immediately** to the maintenance department.
- Timely repair of leakages helps in **minimizing water wastage and improving overall water management efficiency**.
- Proper maintenance of the water distribution network ensures **continuous and reliable water supply for academic and sanitation needs**.



## Water Conservation Awareness

Water conservation awareness is promoted through student activities and campaigns.

Activities include:

- Awareness programs and workshops

### Water Conservation Awareness through Posters and Signage

- The institution displays **water conservation posters and awareness messages** at prominent locations across the campus of Saraswati College of Pharmacy to encourage responsible water use.
- Awareness posters such as **“Water Costs – Make Every Drop Count”** and **“Please Turn Off the Water”** remind students and staff to avoid unnecessary wastage of water.
- Visual messages like **“Conserve Water, Save the Planet”** promote environmental responsibility and sustainable living practices.
- These posters are placed near **washrooms, water taps, and common areas** to continuously remind campus users about the importance of saving water.



### Poster Competitions on Water Conservation

- The institution organizes **poster competitions on water conservation** to raise awareness among students about the importance of saving water at Saraswati College of Pharmacy.

- Students actively participate by creating **innovative and creative posters** highlighting themes such as water scarcity, responsible water use, and environmental sustainability.
- The activity encourages students to **express ideas and solutions for conserving water** through visual communication.
- Poster competitions help in **developing environmental awareness and social responsibility** among students.
- The displayed posters serve as **educational tools for the campus community**, spreading messages like “Save Water” and “Every Drop Counts.”
- Such activities motivate students to **adopt water-saving habits in their daily lives**



### Participation of NSS and Eco-Clubs in Awareness Drives

- The **NSS unit and Eco-Club** of Saraswati College of Pharmacy actively organize awareness drives to promote water conservation and environmental sustainability.
- Students participate in **rallies, campaigns, and awareness programs** to educate people about the importance of saving water.
- Volunteers spread messages on **responsible water usage, prevention of water wastage, and protection of natural water resources**.
- Awareness drives are conducted both **within the campus and in nearby communities** to encourage collective participation in water conservation.

- NSS and Eco-Club members engage students through **interactive sessions, demonstrations, and discussions** on sustainable water management practices.
- The initiatives help in **developing environmental awareness and social responsibility** among students.



## Rainwater Harvesting System

### Saraswati College of Pharmacy

#### 1. Rainwater Harvesting

Saraswati College of Pharmacy has installed rainwater harvesting system where rainwater from academic buildings, laboratories, and administrative blocks is collected through pipelines and directed towards recharge structures.



## 2. Filtration and Storage System

Rainwater collected from rooftops passes through **filtration units** to remove debris and impurities before it is stored or directed into recharge pits.



### 3. **Water Utilization for Campus Activities**

The harvested rainwater is utilized for **gardening, landscaping, cleaning, and other non-potable uses**, reducing dependence on borewell or municipal water.

