



গড়গাঁও মহাবিদ্যালয়
GARGAON COLLEGE

WATER CONSERVATION FACILITIES

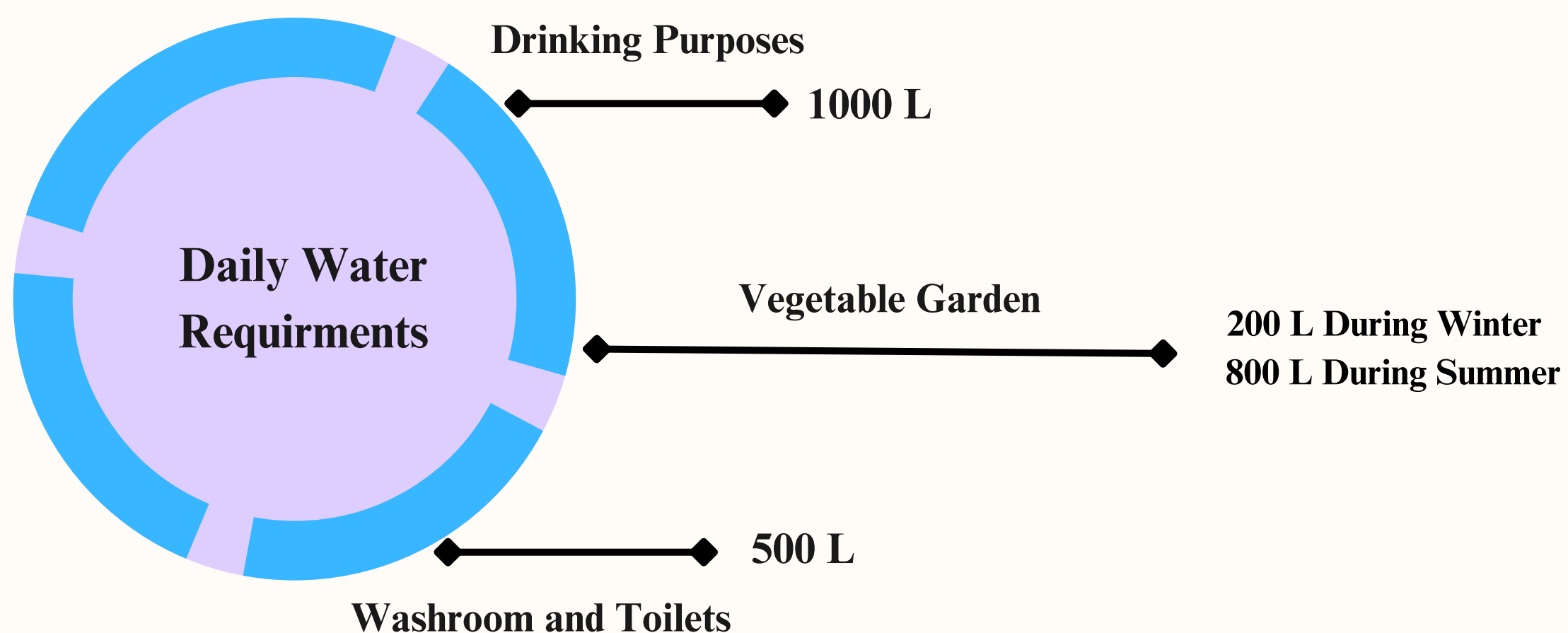
2023-24



Water Conservation Facilities at Gargaon College

This indicator comprehensively addresses water usage, sources, irrigation methods, and water-related appliances and fixtures. A water audit, a non-onsite study and evaluation, is conducted to pinpoint water usage patterns and enhance efficiency. The audit is typically carried out during the February-March period when water consumption peaks. The primary water source in the area is groundwater, complemented by government-supplied water within the campus and hostels. Additionally, rainwater collection pits or ponds are strategically placed to recharge groundwater levels. Water serves multiple purposes including drinking, sanitation, and gardening. Notably, there are no reported instances of water loss due to leaks or tank overflow. Rainwater harvesting reservoirs are diligently maintained within the college campus to maximize water conservation efforts. To ensure safe drinking water for all, numerous water purifying units are strategically installed across departments, common areas, and the canteen which are accessible to everyone. Furthermore, gardens are irrigated using drip or sprinkler systems to minimize water wastage. Under the guidance of the Public Health Department, construction is underway in the college campus for a ground-level water recharging unit in Nazira, aimed at further bolstering water resource management efforts.

Daily Water Requirements at Gargaon College



Rainwater Harvesting Units

The College maintains rainwater harvesting units at different sites in the campus. At present there are four rainwater harvesting units installed which are in proper working conditions. Rainwater harvesting has become an increasingly vital practice in sustainable water management strategies. Gargaon College has recognized the importance of implementing rainwater harvesting systems to alleviate water stress and promote environmental sustainability.

Objectives

The primary objective of rainwater harvesting at Gargaon College is to augment water resources and mitigate dependence on external water sources. The specific goals include:

- **Water Conservation:** To conserve groundwater and reduce reliance on municipal water sources.
- **Sustainable Water Management:** To promote sustainable water usage practices and minimize water wastage.
- **Environmental Preservation:** To contribute to environmental conservation efforts by replenishing groundwater levels and mitigating runoff pollution.
- **Educational Outreach:** To raise awareness among students, faculty, and the local community about the importance of rainwater harvesting and its role in sustainable development.

Implementation

The implementation of rainwater harvesting at Gargaon College involves several key steps:

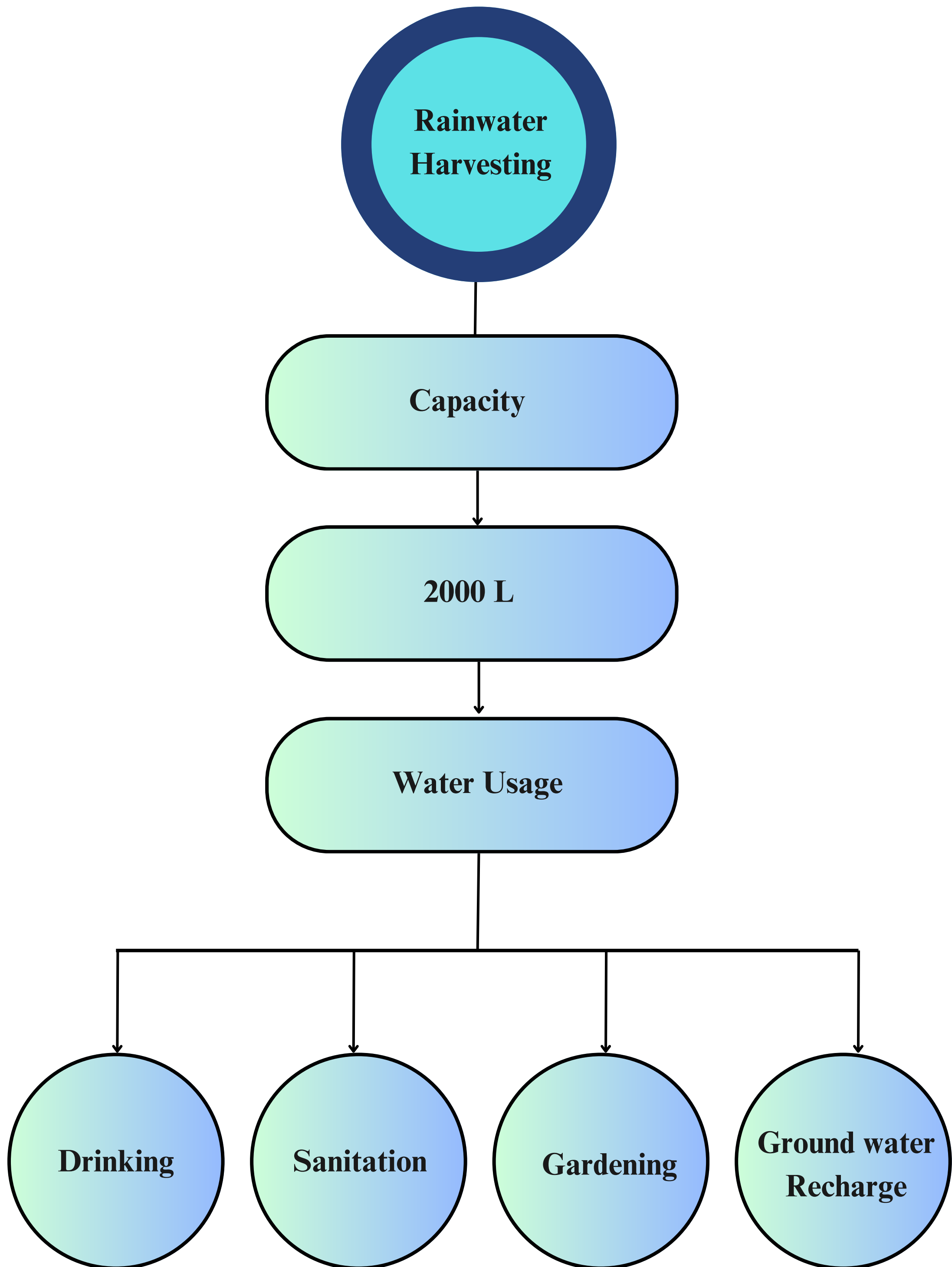
- **Assessment and Planning:** A comprehensive assessment of the college campus was conducted to identify suitable locations for rainwater collection. This involved analysing roof areas, terrain, and drainage patterns.
- **Infrastructure Setup:** Rainwater harvesting infrastructure, including collection gutters, pipes, filters, storage tanks, and recharge pits, was installed across the campus.
- **Education and Training:** Awareness campaigns and training sessions were organized to educate stakeholders about rainwater harvesting techniques, maintenance practices, and the benefits of water conservation.
- **Monitoring and Maintenance:** Regular monitoring and maintenance activities are conducted to ensure the efficient functioning of rainwater harvesting systems. This includes cleaning filters, inspecting storage tanks, and optimizing system performance.

Benefits

The utility of rainwater harvesting in Gargaon College has yielded several significant benefits:

- **Water Security:** By harvesting rainwater, the college has achieved greater water security, especially during periods of water scarcity or supply disruptions.
- **Cost Savings:** Reduced reliance on municipal water sources has resulted in cost savings for the college, contributing to financial sustainability.
- **Environmental Impact:** Rainwater harvesting has reduced the college's environmental footprint by conserving groundwater resources and minimizing runoff pollution.
- **Educational Value:** The implementation of rainwater harvesting has served as an educational tool, fostering a culture of environmental stewardship and sustainability among students and staff.

Rainwater Harvesting scenario at Gargaon College



Photographs of Rainwater harvesting tanks



Rainwater harvesting tanks

Ground water recharging through Rainwater



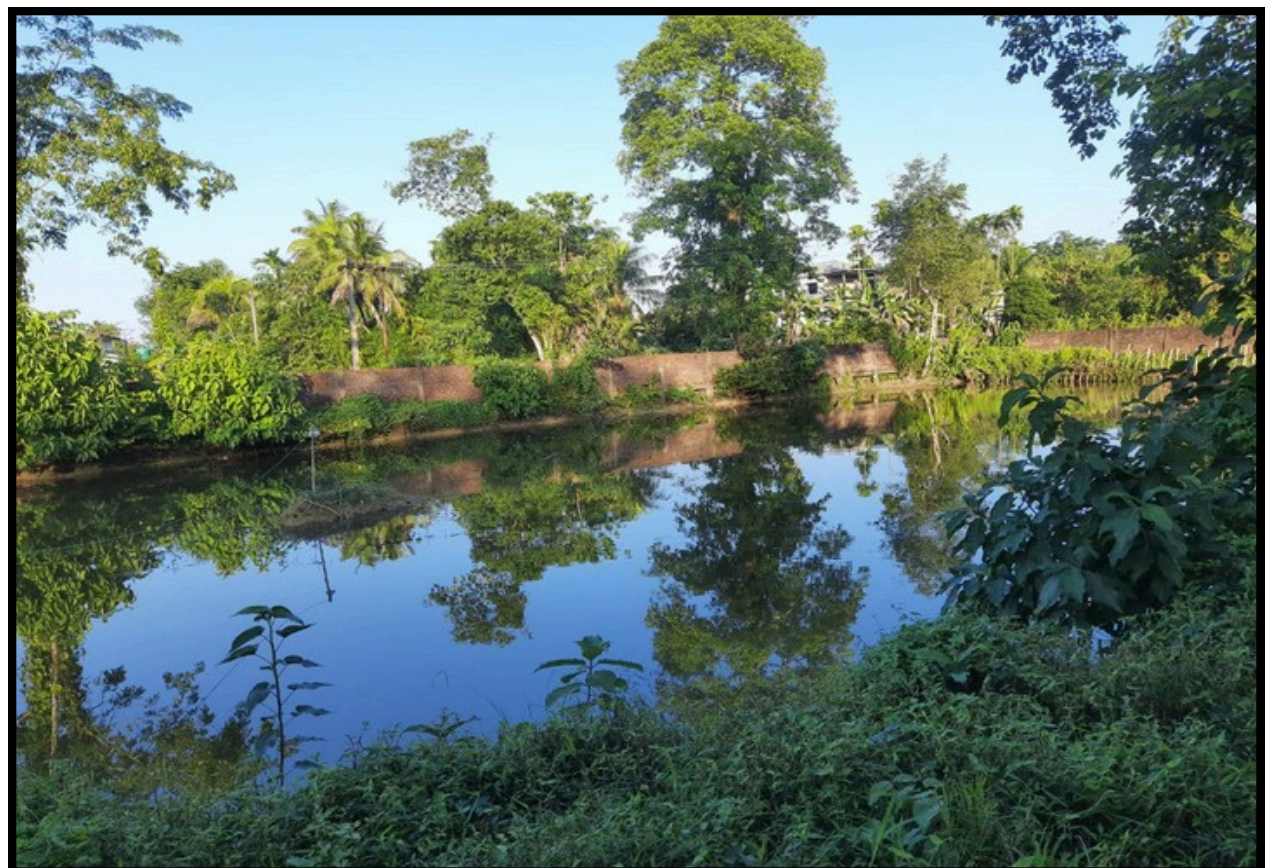
Ground Water Recharging

Bore well/ Open well recharge

The college campus is equipped with a borewell recharge area which efficiently utilizes surface water. It is also an important source of rainwater harvesting.

Construction of Bunds

Bunds are constructed in the college vicinity to provide containment in the event of failure of water supply.



Open well

Maintenance and Cleaning of the Water body

The water body at the Gargaon college is cleaned on a regular basis to take care of the aquatic life and the area ecosystem around it. The water body is maintained periodically so as to provide sustainable, continuous, economically safe, and adequate water to the campus. Another objective of the maintenance is to provide diseases free environment.



Steps Undertaken

A thorough assessment of the water body is done to understand the extent of the pollution and to identify the specific areas that need attention. This involves measuring water quality parameters, examining the surrounding area, and documenting any visible pollutants. A planned regular clean-up is carried out where volunteers consisting of students, faculty members, staff and local people come together to remove trash and debris from the water body and its surroundings. The college provides necessary utilities such as equipment, buckets, gloves when required, trash bags, and any other necessary equipment to ensure everyone's safety. Also appropriate departments are consulted to ensure compliance with regulations.

Additional Efforts

- Awareness campaigns to educate the college community about the importance of clean water bodies and the impact of pollution by utilizing various communication channels such as posters, social media, and campus events to spread the message and encourage participation.
- Implementation of preventive measures to reduce pollution and maintain the cleanliness of the water body is equally emphasized.
- Monitoring and evaluation of the progress is necessary to continuously monitor the water body's condition to track improvements and evaluate the effectiveness of cleaning initiatives.



Cleaning a water body is an ongoing process, and it requires sustained efforts to ensure long-term cleanliness and protection. By involving the college community and raising awareness, we can make a significant impact on preserving the water body for future generations.

