

**RAJAGIRI COLLEGE OF SOCIAL SCIENCES
(AUTONOMOUS)**

INTERNAL QUALITY ASSURANCE CELL

WATER CONSERVATION POLICY

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INTRODUCTION

Water is material for the operational sustainability of all educational institutions, including RCSS. Our water conservation policy is based on design efficiency, water treatment, recycling, and replenishment. Ensuring utilisation of water in a manner that places the needs of the future generations at par with the needs of the present generation is to be considered by every individual as well as institution.

Water Conservation policies adopted by RCSS includes all the activities and practices to sustainably manage the natural resources of fresh water, to protect the hydrosphere and to promote a judicious utilisation of water. Contributing towards the welfare of the society by helping in the preservation of water and uplifting a generation which is awakened to the need of protecting water resources is an important objective of this institution, hence RCSS, has designed the following water conservation policy.

GOALS

To achieve Rajagiri's primary goal of achieving water neutrality by 2025, RCSS has implemented water-efficient fixtures in its new constructions in both campuses, ensuring 100% treatment and recycling of sewage and rainwater harvesting. Sewage is treated using state-of-the-art technologies and recycled for use in flush tanks, and irrigation. Student and staff engagement plays a major role in our water sustainability strategy. At RCSS, we view water from the three inter-related dimensions of Conservation, Responsibility and Security; our articulated goals are therefore predicated on these three dimensions.

- **Water efficiency** - Continuously improve water efficiency of our operations.
- **Responsible Sourcing** - To ensure responsible sourcing and water management in proximate communities, especially in locations that are prone to water scarcity.
- **Water security** - Recognizing water availability as a business risk, to proactively assess and plan for the water security of the organization in a manner that is congruent with the first two objectives.



PROVISIONS

RCSS promotes water conservation and water-use efficiency measures as essential elements of sound water resource management. RCSS encourages all its stakeholders to support policies and programs for water conservation that would achieve;

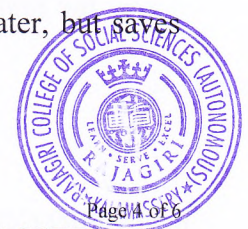
- i) A sustainable balance between demand management and reduced waste through accurate accounting of water volume.
- ii) Water conservation education to all the stakeholders of RCSS.
- iii) Research and implementing of practices that promote efficient use of water.

The provisions through which they can be achieved are as follows:

- i) All buildings and infrastructure to be designed with water efficient facilities.
- ii) Provide training on the water conservation measures adopted by the college to all the students' staff and other stakeholders of the college.
- iii) Ensure awareness about the water conservation policy of the college among all the stakeholders
- iv) Use of less water to achieve original purpose or increasing productivity using the same volume of water.
- v) Recycle water to minimise the need to use more water.
- vi) Use lower quality water that is fit for purpose wherever possible.

RAINWATER HARVESTING STRUCTURES

In Kerala, groundwater is recharged by feeding rainwater into open wells, ponds and bore wells. RCSS being located in an urban area, and with constraints of land space, it is necessary to construct rainwater harvesting structures in both the campuses. The construction of rainwater pits is to be carried out in an aesthetic manner, in accordance with the building structures, and with a multi utilitarian view. Such structures not only saves water, but saves money and reduces our impact on the environment.



WATER EFFICIENCY

An integrated approach for water efficiency is as articulated below:

- Implementing standard metering infrastructure and procedures across campuses.
- Demand side optimization (improving efficiency through flow restrictors across campuses and arresting leakages).
- Improving recycling levels through ultra-filtration with eventual use for non-contact applications like landscaping and sanitation.
- Integrating rain water harvesting into the consumption side of the campus water cycle.
- Improving water governance by building user awareness and involvement of water plumbers.

INITIATIVES BY RCSS

At RCSS, we are working towards making our facilities more and more water – sustainable. This has been achieved with the use of water efficient fixtures, waste water treatment technologies, rain water harvesting and smart metering for monitoring.

Aerators: Installation of Aerators in all new wash basins across the campuses. Aerators provide a constant flow rate of 0.5 GPM through variable pressure optimizing water use to great extent.

Flow regulator taps in urinals: Installation of flow regulator taps in the mend urinal system by installing key valves in the Carmel block. This system doesn't require water for flushing. This in turn has reduced water consumption and energy related to pumping of the system.

Sewage Treatment Plants: The treated water from the Sewage Treatment Plants are tested and are in conformance with the parameters specified by the respective local pollution control boards.



Waste water reuse: Entire waste water generated in the campus is treated at our sewage treatment plants. Recycled water is used for landscaping and flushing. We have installed Ultrafiltration and Reverse osmosis in both campuses. The water quality is monitored on a regular basis ensuring standards and safety of the employees.

Nanofiltration: Conventional water softeners is being replaced by membrane softeners (Nanofiltration) which gives good quality softened water. Nanofiltration removes nearly all viruses, most of the natural organic matter and a range of salts. Nanofiltration removes divalent ions, which make water hard, so it is used to soften hard water.

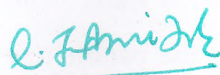
Rain Water Harvesting: Rainwater harvesting and integration into freshwater use is a significant improvement area for water sustainability across our campuses.

Student and Staff Participation: Encouraging of students and staff to participate and share their view on the sensitive issues like water and waste.

Community Programmes: Involvement of Rajagiri outreach, Rajagiri Research Institute, NSS, ENCON and other student bodies in projects like JalaNidhi, Suchitwa Bodhana Yajnam, and other programmes.

CONCLUSION

The negative impact of climate change is causing water-related disasters such as floods in Kerala, annually. Sustainable water management becomes an absolute necessary for sustainable living in the present environment. Rajagiri, with the help of its Water Conservation Policy aims to promote water conservation and its efficient use, as envisioned by the Ministry of Ministry of Water Resources of the Government of India in its National Water Policy.



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