7.1.6 Rain water harvesting structures and utilization in the campus

Extensive rain water-harvesting facilities have been installed in all the new buildings in the campus to recharge the underground water table. The Institute's bore wells get water at 100 to 120 ft. depth, while general levels in Agra lie between 200 and 250 ft.

River Bank Filtration (RBF) plant is under construction to provide clean potable drinking water to the nearby villagers. The project is funded by DST and Solar operated pumps are used for drawing water to make the process cost-effective and commercially viable.

Hygiene and Safety: Use of $KMnO_4$ (Potassium Permanganate) in water and in production plants run by students and general awareness on hygiene and safety, makes people and the surrounding community and villages healthier.

For water conservation in the Campus, almost all the buildings are having the facility to collect the rain water and recharge the underground water table. The water is also economically supplied and used.

Rainwater Harvesting facilities consist of the following network:

- *Bore wells : 6*
- *Roof top rain harvesting in Girls hostel, in which rainwater is collected in discarded bore well whose level had receded, which is now replenished and caters to the needs of the hostel.*

The institute gets water from the STP that treats water from Yamuna river, by the Works Dept., Agra, which is used for horticultural and agricultural activities.

The various strategies for water conservation and use at DEI include the following:

1. *Generate awareness about water conservation through social services, NSS activities, special B.Voc. and M.Voc. programmes, seminars, workshops and conferences.*
2. *Monitor and minimize water consumption.*
3. *Plantation of indigenous water efficient trees and plants in and around the campus.*
4. *Encourage research and implementation of innovative technologies that include river water filtration, bioremediation of toxic metals from water, rainwater harvesting and recycling of sewage water through an indigenously developed reed bed.*

Students are trained to be conscious about environmental issues and be responsible citizens, through the compulsory core course on Environment Education and the variety of NSS and extension activities.

River Bank Filtration Project

- https://www.dei.ac.in/dei/files/NAAC%20Self%20Qualitative%20Assessment/River%20Bank%20Filteration%20Project%207.1.6/RBF%20-%20Project%20Summary.pdf

- https://www.dei.ac.in/dei/files/NAAC%20Self%20Qualitative%20Assessment/River%20Bank%20Filteration%20Project%207.1.6/RBF-SanctionLetter.pdf
- https://www.dei.ac.in/dei/files/NAAC%20Self%20Qualitative%20Assessment/River%20Bank%20Filteration%20Project%207.1.6/RBF-SolarFundingSanction.PDF