



Mehr Chand Mahajan
D.A.V. College for Women
Sector 36-A, Chandigarh – 160036
Phone: 0172-2603355, Fax: 0172-2613047

Supporting Document for Criterion 7

7.1 - Institutional Values and Social Responsibilities

7.1.4 Water conservation facilities available in the Institution

(Any other relevant information):

- Rainwater harvesting
- Bore well /Open well recharge
- Construction of tanks and bunds
- Waste water recycling
- Maintenance of water bodies and distribution system in the campus

IQAC, Coordinator

Offg. Principal

7.1.4. Relevant Information - *Water conservation facilities available in the Institution:*

7.1.4. Water conservation facilities available in the Institution:

To promote sustainable water management practices and ensure efficient utilization of water resources, the institution has developed a water action plan. For more information, visit: <https://mcmdavcwchd.edu.in/water-action-plan-2/>

1. Rainwater Harvesting System under the aegis of RUSA

- With the growth in population and changes in our climate, we all need to be more responsible when it comes to how much water we use. Rainwater harvesting is now being reinvented for many new buildings with the robust guidelines for sustainable living. Our institution for Women is committed to sustainable growth and protection of the



ecosystem. Therefore, Rainwater harvesting System was duly installed to channelize the rainwater accumulation in the campus. The said project was initiated under the aegis of erstwhile RUSA scheme in August 2018 and was completed in November 2018 at the cost of 26.22 lac.

- It is a rooftop and Surface Rainwater harvesting system with RCC Tank cum injection Well a tube well up to depth of 100M BGL, PVC/RCC pipes and Manhole. Underground chambers were constructed to harness rainwater accumulated on the rooftops



7.1.4. Relevant Information - *Water conservation facilities available in the Institution:*

and open area in the five blocks of the hostel. The total rainfall in catchment area (rooftops of buildings, total open paved and parking areas and total green area is approx.46, 935 KL/year).

- The college has one functional ground water recharge system of theoretical total capacity of 89 KL of groundwater recharge per hour. The injection well consists of a 400mm pipe to a depth of about 30 metres average as per documents.
- The college has a connection of **Tertiary Water** approved by the Municipal Corporation. The connection load is 2.0 and this water is used for irrigating the gardens in the campus.

Refer to: <https://mcmdavcwchd.edu.in/sustainable-practices/#1561628860475-2e040e4f-d01f>

Video link describing Rainwater Harvesting:

<https://drive.google.com/file/d/1pHFU2RQIriqstRjW2RRg9YJkP8ijah23/view>



7.1.4. Relevant Information - *Water conservation facilities available in the Institution:*

2. Biodiversity Pond:

- The biodiversity pond is located in the Botanical Garden of the campus. It houses a collection of hydrophytes including *Nelumbo*, *Eichhornia*, *Hydrilla*, *Lemna* and *Vallisneria*.
- Maintenance of the pond is carried out from time to time. *Gambusia* fish is another regular feature of the pond water. Introduction of this fish in the pond serves as a biological control of mosquitos as this fish feeds upon the mosquito larvae and thus prevents the breeding of mosquitos in the pond.



- **Water-Boosting System:**

To meet the needs of the hostel students, a Water Boosting System has been installed in A & B Blocks. An Underground Water Reservoir of 10000-gallon



7.1.4. Relevant Information - *Water conservation facilities available in the Institution:*

capacity has been constructed with RCC Walls of 9 inches thickness, doubly reinforced.



- 3 Horsepower single phase submersible motor pump, having 32mm diameter suction has been installed for boosting up the level of water with the help of 750 ft distribution pipe.

- This system under the aegis of RUSA has proved to be a valuable addition as the students do not face water scarcity even when the Water supply in the city is low. The institution’s vision of providing “Quality education in quality ambience” stands reiterated as the stakeholders have expressed huge appreciation for this initiative.



7.1.4. Relevant Information - *Water conservation facilities available in the Institution:***3. Waste Water Recycling**

- To strengthen the zero-waste policy of the college on liquid waste management, 50,000 Litres/day capacity **Sewage Treatment Plant (STP)** has been installed in the college campus with the primary objective of recycling liquid wastewater generated in the toilets of the academic and administrative block of the college.
- The STP plant briefly consists of : Collection tank, Settling tank , Aeration tank, Sand filter, Activated Carbon filter and Treated water collection tank.



The College has inducted two functional drainage systems (one in college campus and other one in hostel). College is using reclaimed water supplied by Municipal Corporation Chandigarh and treated water from 50 KLD Sewage Treatment Plant installed in college campus for garden irrigation purpose.

Usage of Water (liter/ day) in campus: 1,59,117 liter/day

Total number of tanks pertaining to fresh Water: 71

Water available for usage: 2,86,300 L

Amount of water recycled back: **50,000 Liters/day**

Due to Tertiary water, sprinklers and Sewage treatment plant, the total percentage of water saved is 30%.

Video describing STP:

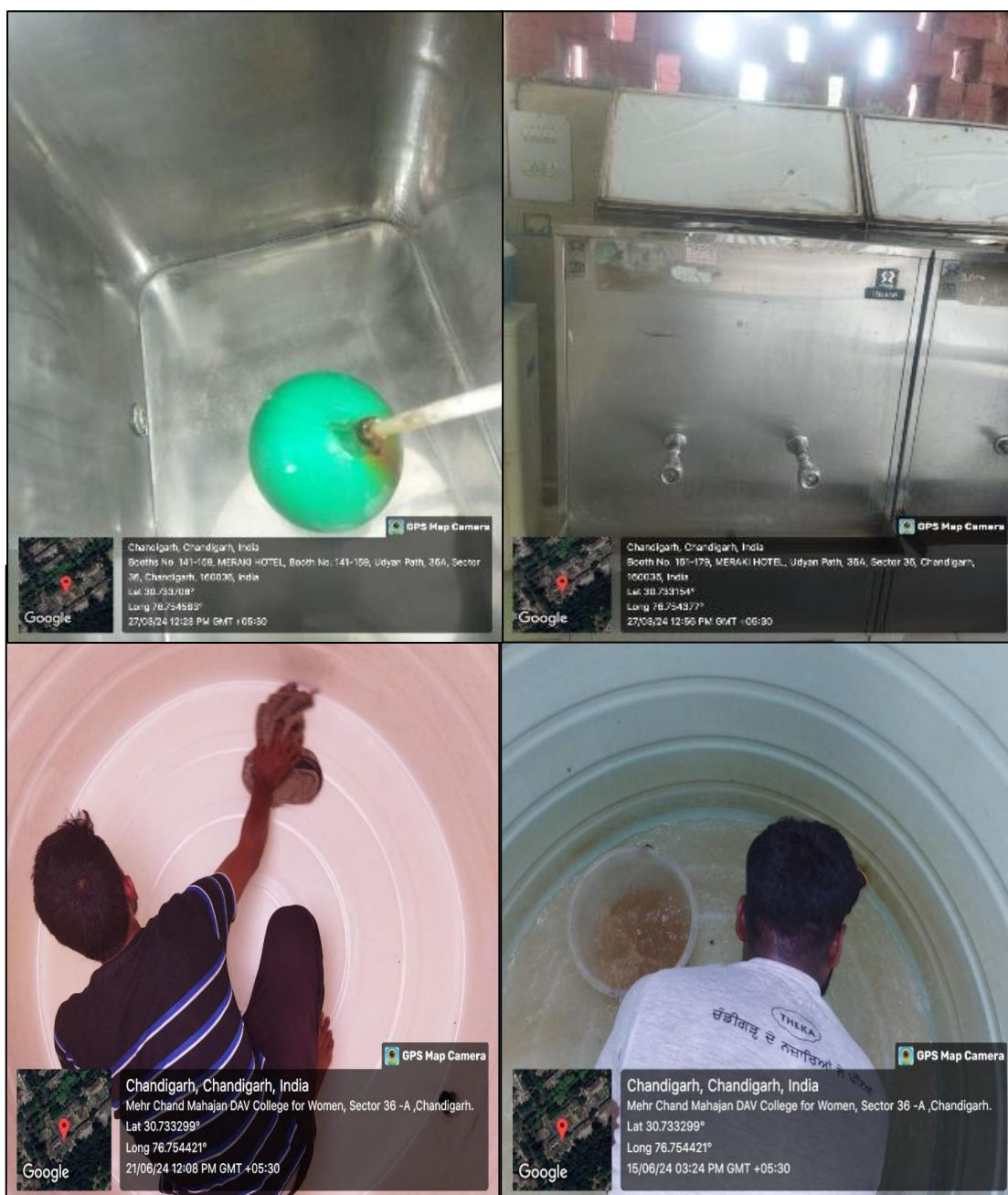
<https://drive.google.com/file/d/1OQaD8giCK-qEUXxgy3jQCFCQZ7Mp-ftb/view>

7.1.4. Relevant Information - *Water conservation facilities available in the Institution:*

- Due to the surface and rooftop rainwater harvesting system and water recycling system in place, the college campus achieves nearly 47% Net Zero Water Positive (NZWP) milestone (NZWP being saving or creating more water than being actually used or supplied).
- Further, according to water audit done, the water consumption and demand of the college has been observed and estimated to be nearly 90% more efficient as compared to Indian standards IS 1172:1993 (2002).

4. Regular cleaning and Maintenance of water bodies (tanks, purifiers etc.)

Periodic cleaning of water bodies including tanks, purifiers is being done throughout the year.



7.1.4. Relevant Information - Water conservation facilities available in the Institution:



Cleaning of Water Tanks

In addition to the above facilities, the college committees are proactive in making the stakeholders aware on the importance of water conservation by placing related signboards at different places within the campus in order to inculcate the concept of water conservation in all possible ways.



Water conservation Signboards within campus

7.1.4. Relevant Information - *Water conservation facilities available in the Institution:*

Besides, the college conducts activities related to water conservation and efficient usage of water among the students as listed.

Activities related to Water Conservation being held by various college committees [2023-24]

Sr. No	Organizing Committee/Department	Title of Activity	Dates	Participants benefitted	Objective(s)
1	NSS Units and Swachhta committee	Rally and human chain on the theme 'Save water' in marketplace and nearby areas of sector 36.	29.03.2024	130	To create awareness among the public about the importance of saving water, rainwater harvesting, and fair usage of water.
2	NSS units and Medical Committee	Water Conservation Rally in village Maloya	22.03.2024	30	To educate the public about the importance of sustainable water management practices and need of water conservation.
3	NSS Units	Anti Dengue Awareness Program and Awareness on Proper Water Disposal Practices	14.10.2023	25	To educate the public and students about proper and timely cleaning of water storage bodies, threat of dengue and efficient water disposal practices

7.1.4. Relevant Information - Water conservation facilities available in the Institution:



Awareness rally on 'Water Conservation' at village Maloya to commemorate World Water Day on 22.03.2024



Awareness in Wastewater disposal and Anti Dengue Programme on 14.10.2023



Rally and human chain on the theme 'Save water'