



# **DVV CLARIFICATION**

7.1.4 Institution has water management and conservation initiatives in the form of rainwater harvesting waste water recycling and reservoirs\tanks\bore wells.



# **RAIN WATER HARVESTING**

## **INTRODUCTION**

Rainwater harvesting (RWH) is the process of collecting and storing rainwater for reuse before it reaches the ground. This technique has been employed for centuries and has gained renewed interest in recent years due to its potential to address water scarcity, reduce flood risks, and promote sustainable water management. Water is so essential for life that it's simply impossible to imagine life without water. India has 16% of the world's population and only 4% of the world's water resources are available for use, and that too are depleting rapidly. The demand for water is expected to grow from 40 billion cubic metres (bcm) currently to around 220 bcm in 2025. The uneconomical and unethical use of water by human beings is the sole reason for the exploitation and deterioration of this valuable natural resource. Thus, both quality and quantity of water are at stake and have to be taken care of. It's the moral duty and social responsibility of each individual and community as a whole to contribute to conserve water and rejuvenate the water resources.

In this direction, our institute has made efforts to ensure water conservation and water harvesting. The campaign has been channelized



with the Motto "Be Water Smart, Every Drop Counts" following the 3R principle - Reduce, Reuse and Recharge.

The primary goal of Kautilya Mahila Shikshak Prashikshan Mahavidyalaya, Kota is to provide safe and clean water in whole campus area. The college is implementing water efficient practices.

Student and staff engagement play a major role in our water sustainability strategies.

Reducing water consumption and protecting water quality shall be the key objectives of sustainable policy of Kautilya Mahila Shikshak Prashikshan Mahavidyalaya, Kota.

## **Goals and plans:**

- ➤ Maximize water use efficiency and minimize wastage of water.
- > All existing buildings to be used for rainwater harvesting.
- Promote investment in green infrastructure in all future development plans.
- Ensure awareness about the water conservation policy of the college among all the staff and students.
- Create awareness about the cost effectiveness of water conservation projects among students and local communities.
- Organise various outreach programmes under the leadership of NSS, Eco-club, Science-club and other student bodies.



- Promote students to monitor and collect information related to water bodies and their pollution of nearby areas.
- Inform, educate and increase the awareness regarding the importance of water to life and the need for conservation and efficient use of water.

## **IMPORTANCE OF RAINWATER HARVESTING**

- 1. **Water Conservation**: RWH helps in conserving water by capturing rainwater that would otherwise be lost as runoff.
- 2. **Reduction of Urban Flooding**: By diverting rainwater into storage systems, RWH can mitigate flooding in urban areas.
- 3. **Groundwater Recharge**: Harvested rainwater can be used to recharge groundwater aquifers, supporting local ecosystems.
- 4. **Cost-Effective**: It can reduce water bills and lessen the demand on municipal water supplies.
- 5. Environmental Benefits: Reduces soil erosion and the risk of pollution by minimizing surface runoff.



## METHODS OF RAINWATER HARVESTING

- 1. **Rooftop Harvesting**: Collecting rainwater from rooftops through gutters into storage tanks.
- 2. **Surface Harvesting**: Collecting runoff from land surfaces, typically through constructed ponds or reservoirs.
- 3. **Infiltration Pits**: Small pits or trenches designed to allow rainwater to seep into the ground, promoting groundwater recharge.

#### COMPONENTS OF A RAINWATER HARVESTING SYSTEM

- Catchment Area: The surface that collects rainwater (usually rooftops).
- **Downspouts**: Channels that direct rainwater from the catchment area to storage.
- Storage Tanks: Containers that store collected rainwater for future use.
- Filtration System: Filters that clean the water before it enters storage, ensuring it is safe for use.
- **Natural reservoirs**: The runoff has to be minimized adequate number of percolation pits & dispersion trenches behind the trees.





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