

**Vignan's Foundation for Science,
Technology & Research
(Deemed to be University)**

**WATER CONSERVATION
POLICY**



VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

-Estd. u/s 3 of UGC Act 1956

Vadlamudi, Guntur District - 522213



Background

Vignan's Foundation for Science Technology & Research (Deemed to be University) is located at Vadlamudi, Guntur. The water is available at a depth of 240 feet. It has around 8000 students and 1000 faculty and non-teaching staff, and 3000 students in hostel. The consumption of water is 8 lakhs liters every day. Therefore, from faculty to administration, staff, and students, takes a stand on fair access to drinking water, and conserves the precious resource.

Water use efficiency planning can produce permanent and significant water savings leading to future development opportunities at VFSTR University.

I. Policy on water conservation

1. Reduce the wastage of water by fitting proper valves and arrest the leakages
2. Using suitable equipment, technology and systems to reduce the amount of water used
3. Recycle water to minimize the need to use more water and recycled water to be used for gardening.
4. Watering to the gardening to be done in the morning or in the evening to reduce evaporation losses.
5. Sustainable storm water management practices, keeping gallons from the sewer system for recycling
6. Rainwater harvesting pits have been provided for improving the groundwater depth.
7. Faculty and students have been instructed use water economically.
8. Save water boards have been provided at different places to educate the students and staff.
9. Guest lectures and expert lectures have been arranged regularly on water conservation.
10. World water day, world environment day have been celebrated to imbibe the importance of water conservation.
11. Install flow control devices such as low-flow shower heads and flush valves.
12. University have installed rainwater harvesting pits along with thisrecharging the bore wells.

II. Prevention of wastage of Water in VFSTR University Hostel and Quarters

(i) Save Water in the Bathroom

- Frequently checking toilets for leaks
- Installed water-saving shower heads or flow restrictors
- Kept board near each taps 'Turn off water after use'
- Installed low water capacity flush tank.

(ii) Save Water in the Kitchen and Laundry

- Use your automatic dishwasher only for full loads
- Use your automatic washing machine only for full loads
- If you wash dishes by hand, don't leave the water running for rinsing
- Don't let the faucet run while you clean vegetables
- Frequently checking faucets and pipes for leaks

(iii) Save Water Outside

- Watering lawn only when it needs
- Deep soak the lawn - water long enough for the moisture to soak down to the roots
- Plant drought-resistant trees and plants that need less water
- kept a layer of mulch around trees and plants
- Use a broom, not a hose, to clean driveways and sidewalks
- Don't run the hose while washing vehicle


REGISTRAR
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1. Water Conservation Practices at VFSTR

1.1. Rainwater harvesting:

VFSTR is always ahead in implementing latest technologies that are widely being accepted by outside world. Among various innovative applications, rainwater harvesting is one among many that is being developed and implemented in this vast area of the campus. VFSTR is located at 25 kms from Guntur, Andhra Pradesh (India). It lies between latitude $16^{\circ}14' 4''$ N and longitude $80^{\circ} 33' 40.5''$ E. The population of VFSTR campus including staff and students are approximately 4000 Nos. on an average. Entire VFSTR campus contains 44.25 acres or 1,79,074 sq. This area holds various types of buildings namely A-Block, U-Block, Pharmacy, H-Block, Boys and Girls hostel, Gym, Library etc. Figure 16 and 17 show rainwater harvesting tank that is in action by collecting rainwater that fall on the roof terraces of the building as well as from open spaces like roads through suitable drainage system.



Figure 1: VFSTR campus having rainwater harvesting pit and drainage system (yellow lines)



Figure 2: VFSTR campus having rainwater harvesting tank

1.2 Bore well /Open well recharge

The borewells are recklessly drawing water from below the ground. Rainwater is the only option available for reviving the depleted ground water but this natural process of rainwater seeping under the ground through fixtures and cracks is a very slow process. Research shows that only 5–10% of seasonal rainfall infiltrates into groundwater in the hard-rock regions. Also, in case of scarce rainfall, there isn't enough water being renewed underground. Water and environmental conservationists brainstormed and came to the solution called Borewell recharge. Borewell recharging technically focuses on the use of harvested surface water (obtained via rainfall or nearby water bodies) where runoff water begins to pass through a natural filter made up of large and small stones. Then, there is another layer of sand through which water passes and finally, it perforates in the borewell pipe via a fine mesh which is wrapped around the drilled casing pipe. The fine mesh ensures the removal of big and tiny impurities before the water enters the borewell.



Figure 3: Borewell /open well recharges at VFSTR campus

1.3 Construction of tanks and bunds

The proper Bunds are constructed in the campus and used for retaining the water, creating obstruction and thus to control erosion. Bunds can be used to hold rainwater in lightly sloping plains and to ensure that bunds continue to provide the necessary protection against leaks and spills etc. Hence bunds should be assessed periodically to ensure that they continue to provide sufficient integrity around the campus.

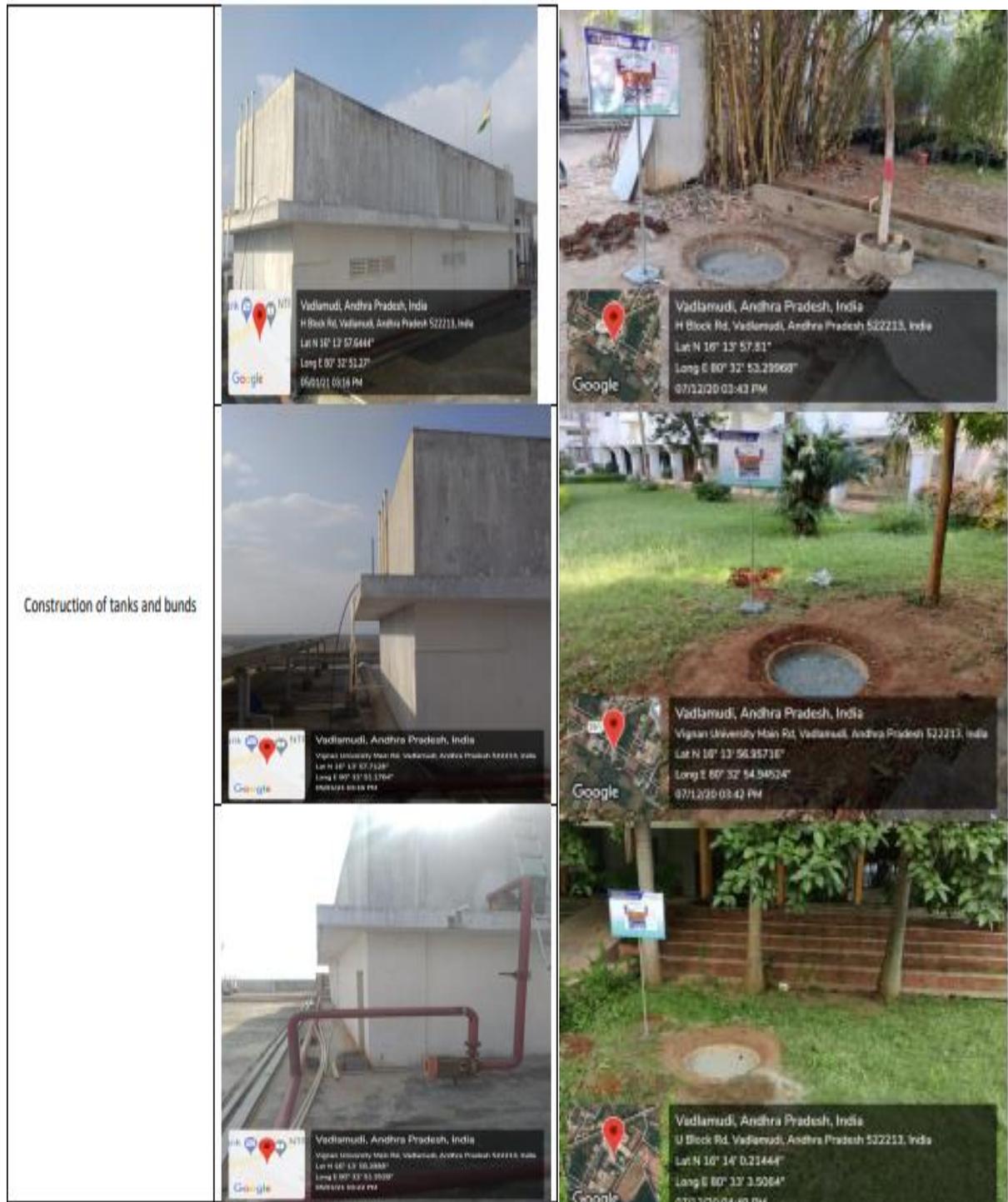


Figure 4: Tanks & Bunds in VFSTR campus