

Design of Rainwater Harvesting System at CJITS

Mr. T. Asher Ebenezer, K. Bhavani, Md Muzamil Ahmed, Md Abdul Haseeb, T. Pavan Kumar

Christu Jyothi Institute of Technology and Science, Jangaon, Telangana, India

Jawaharlal Nehru Technological University of Hyderabad, Telangana

Abstract: *This research paper Of Design Of Rainwater Harvesting System focuses on the conceptualization, design, and implementation of rainwater harvesting system as an innovative solution for sustainable water management. Recognizing the increasing importance of water conservation, our study explores the feasibility and effectiveness of utilizing rainwater harvesting pits within the campus at Christu Jyothi Institute of Technology and Science, Jangaon focuses in Rainwater Harvesting as a viable and eco-friendly approach. This initiative aims to address the increasing water stress faced by our campus and contribute to the broader goal of sustainable water management. By capturing rainwater within the pits, the risk of flooding is mitigated, preventing soil erosion and the loss of valuable topsoil. Our system incorporates a network of strategically placed collection points such as rooftops and paved surfaces equipped with gutters and downspouts. The main aspect of our project is the integration of modern technology to enhance efficiency and monitoring. This will also help manage the distribution of harvested rainwater for irrigation, flushing, and other non-potable purposes, reducing dependency on conventional water sources*

Keywords: Rainwater harvesting, sustainability, storage, bore well and design