

BVV Sangha, Bagalkot AMRUTA INSTITUTE OF ENGINEERING & MANAGEMENT SCIENCES Approved by AICTE, New Delhi Recognized by Government of Karnataka & Affiliated to VTU, Belagavi

Department of Information Science & Engineering Report



on Sir M. Visvesvaraya Rain Water Harvesting Theme Park Visit on 31–8– 2024

Located in Jayanagar, Bangalore, is a

pioneering initiative that combines education, sustainability, and environmental conservation. Established by the Bangalore Water Supply and Sewerage Board (BWSSB) and named after Sir M. Visvesvaraya, one of India's most renowned engineers and statesmen, this theme park is a vital resource for raising awareness about water conservation, particularly in the context of urban India.

Background and Significance:

Bangalore, like many rapidly urbanizing cities in India, faces severe water scarcity issues. The burgeoning population, coupled with unpredictable monsoons and thedepletion of groundwater levels, has necessitated innovative solutions toensure water availability. Rainwater harvesting (RWH) has emerged as a sustainable practice that addresses these challenges by capturing and storing rainwater for various uses. The Vishveshvaraya Rain Water Harvesting Theme Park is central to promoting this practice, providing both educational and practical insights into the implementation of RWH systems.

*Design and Layout of the Park

The theme park spans approximately one acre and is designed to be both informative and interactive. It serves as a live demonstration of rainwater harvesting techniques. showcasing different methods that can be implemented in residential. commercial. and industrial settings. The park is divided into several sections. each focusing different on aspects of rainwater harvesting and water conservation.



1. Demonstration Models:

The park features various RWH models that illustrate how rainwater can be collected from rooftops, open spaces, and other catchment areas. These models demonstrate the use of percolation pits, recharge wells, and storage tanks, among other techniques. Each model is accompanied by detailed explanations and guides, allowing visitors to understand the design, construction, and maintenance of these systems.

2. Exhibition Hall:

An exhibition hall within the park houses informative displays, charts, and models that explain the importance of rainwater harvesting. It provides a comprehensive overview of the water cycle, the impact of urbanization on water resources, and the benefits of harvesting rainwater. The hall also features case studies of successful RWH implementations across different parts of India, providing real-world examples of how these systems can make a significant difference.

3. Interactive Kiosks:

To engage visitors, especially students and younger audiences, the park includes interactive kiosks equipped with touch screens. These kiosks provide educational games, quizzes, and simulations related to water conservation and rain water harvesting. The interactive nature of these kiosks makes learning about water conservation an enjoyable experience.

4. Water Conservation Techniques:

In addition to RWH, the park also highlights other water conservation techniques such as greywater recycling, drip irrigation, and efficient plumbing fixtures. Demonstrations of these techniques underscore the importance of reducing water wastage and optimizing the use of available resources.

5. Rain Garden:

One of the unique features of the theme park is the rain garden, which is designed to absorb and filter rainwater naturally. The garden is planted with native species that thrive in water-rich environments, and it acts as a natural filtration system, reducing runoff and improving groundwater recharge. This section of the park not only contributes to water conservation but also enhances the aesthetic appeal of the area.



Educational Programs and Outreach

The Vishveshvaraya Rain Water Harvesting Theme Park is not just a static display of models and exhibits; it is a dynamic center for education and community outreach. The BWSSB organizes regular workshops, seminars, and training sessions at the park, targeting a wide range of audiences including students, homeowners, architects, builders, and government officials.

<u>1</u>.Workshops and Training:

The park hosts hands-on workshops where participants can learn how to design, install, and maintain rainwater harvesting systems. These workshops are conducted by experts in the field and cover both the technical and regulatory aspects of RWH. Participants are provided with practical knowledge and skills that they can apply in their own homes or workplaces.

2. College Programs:

Recognizing the importance of educating the younger generation, the park offers specialized programs for colleges. These programs include guided tours, interactive sessions, and project-based learning opportunities. Students are encouraged to participate in activities such as designing their own rainwater harvesting models or conducting water audits in their schools. Such initiatives help inculcate a sense of environmental responsibility among the youth.

3. Public Awareness Campaigns:

The theme park also serves as a hub for public awareness campaigns on water conservation. The BWSSB collaborates with various NGOs, resident welfare associations, and environmental groups to organize events that promote rainwater harvesting and sustainable water management practices. These campaigns are crucial in spreading the message of water conservation to a broader audience.



Impact and Achievements

Since its inception, the Vishveshvaraya Rain Water Harvesting Theme Park has had a significant impact on water conservation efforts in Bangalore and beyond. The park has been instrumental in promoting the adoption of rainwater harvesting systems across the city. As a result, numerous residential commercial complexes. schools, and establishments in Bangalore have implemented RWH systems, contributing to the replenishment of groundwater levels and reducing the dependency on external water sources. The park has also played a key role in influencing policy decisions related to water management. The Karnataka state government, in recognition of the importance of rainwater harvesting, has made it mandatory for new buildings to include RWH systems in their design. The park's educational programs have been critical in regulations these ensuring that are effectively implemented. Moreover, the park has gained recognition as a model for other cities facing similar water challenges. Urban planners and policymakers from different parts of India have visited the park to study its design and replicate its success in their own regions. The park has thus become a symbol of innovation and sustainability in urban water management.



Demo of Rain harvesting methods explanation



Presentation on Importance of Pure Drinking water and Conservation of Water

Conclusion

This Tour helped us to know about the park "The Vishveshvaraya Rain Water Harvesting Theme Park" which is a beacon of sustainable water management in Bangalore. By demonstration. and combining education. community engagement, the park has successfully promoted the practice of rainwater harvesting and contributed to the city's water security. As water scarcity becomes an increasingly pressing issue in urban India, the lessons and practices championed by this theme park will be crucial in shaping a sustainable future. We whole hearted Thanks Amruta Institute of Engineering and Management sciences, Bidadi management for giving this opportunity.

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