



## **Report on One-Day National Service Scheme[NSS]Camp**

**Topic: Water Conservation And Rainwater Harvesting**

**Date:** 29/05/2025

**Venue:** BAIF-Konehalli

**Organized by:** Department of Artificial Intelligence and Machine Learning

Kalpataru Institute of Technology, Tiptur

### **Introduction**

As part of the VTU, **National Service Scheme Subject**, the Department of Artificial Intelligence and Machine Learning organized a **One-Day National Service Scheme** focusing on **Water Conservation And Rainwater Harvesting**.

The primary objective of the camp was to create awareness about sustainable practices, including effective water conservation, while fostering a deeper connection between students and the surrounding community.

### **Participants**

The camp was led by **Dr. Raviprakash M L**, Head of the Department, Artificial Intelligence and Machine Learning, along with faculty members **Prof. Vidyashree M**, **Prof. Divya C B**, A total of **60 students** actively participated in the event.

### **Objectives of the Camp**

#### **1. Raise Awareness**

To educate participants about the importance of water conservation and the urgent need to manage water resources sustainably.

#### **2. Promote Rainwater Harvesting**

To demonstrate the benefits and methods of rainwater harvesting as a sustainable way to supplement water supply.

#### **3. Encourage Community Participation**

To involve individuals, families, and local communities in water-saving initiatives and practical conservation efforts.

#### **4. Demonstrate Techniques**

To showcase simple, cost-effective rainwater harvesting systems and water conservation techniques suitable for homes, schools, and farms.

**5. Build Skills and Knowledge**

To train participants in designing, installing, and maintaining rainwater harvesting structures.

**6. Address Water Scarcity Issues**

To provide long-term solutions to local water shortages by reducing dependency on external water sources.

**7. Promote Sustainable Living**

To inspire lifestyle changes and eco-friendly practices that contribute to long-term environmental conservation.

**8. Encourage Policy Support and Implementation**

To support the adoption of local policies that promote rainwater harvesting and water conservation at a wider scale.

## Case Study and Interaction

- **Rainwater Harvesting Structures**

- **Farm ponds, check dams, nala bunds, and percolation tanks** were constructed to capture and store rainwater.
- Rooftop rainwater harvesting systems were promoted for household use.

- **Soil and Water Conservation**

- **Contour bunding, trenching, and vegetative barriers** were introduced on farmlands to reduce runoff and increase water infiltration.

- **Groundwater Recharge**

- Recharging wells and underground storage helped improve the water table.

- **Agroforestry and Crop Diversification**

- Farmers were encouraged to plant **fruit trees, fodder crops, and adopt sustainable farming**

## Outcomes of the Camp

1. **Improved Awareness on Water Issues**

NSS volunteers and local villagers gained in-depth understanding of water scarcity, conservation methods, and sustainable practices.

2. **Implementation of Small-Scale Conservation Projects**

Volunteers assisted in cleaning and repairing **existing water harvesting structures** such as farm ponds, trenches, and bunds.

3. **Promotion of Rainwater Harvesting**

Demonstrations and awareness drives encouraged households to adopt **rooftop rainwater harvesting systems**.

4. **Tree Plantation Drives**

Planted **native and water-conserving trees** around water bodies and village peripheries, aiding in soil conservation and water retention.

## Conclusion

The Water Conservation and Rainwater Harvesting initiatives at **BAIF, Konehalli** serve as a powerful example of how community-driven, scientifically planned interventions can transform drought-prone rural areas into **sustainable and self-reliant ecosystems**. Through the collaborative efforts of BAIF, local villagers, and NSS volunteers, the region has witnessed a significant improvement in groundwater levels, agricultural productivity, and community awareness.

The NSS camp at Konehalli not only offered hands-on experience in rainwater harvesting and watershed management but also fostered a sense of environmental responsibility and civic engagement among the participants. The success of this initiative underlines the importance of integrating traditional knowledge, modern techniques, and community participation for long-term water security.

Going forward, the learnings from Konehalli can inspire similar efforts across other water-stressed regions, making water conservation not just a necessity, but a people's movement for sustainable rural development.





