



UNNAT BHARAT ABHIYAN REGIONAL COORDINATING INSTITUTE KERALA AGRICULTURAL UNIVERSITY

ONE-DAY INTERACTIVE WORKSHOP ON WATER QUALITY AND SANITATION

09 January 2026
Jyothi Engineering College, Thrissur

Jointly Organised by
**Regional Coordinating Institute – UBA
Kerala Agricultural University (KAU)**
and
**Centre for Water Research and Education (CWRE)
Jyothi Engineering College, Thrissur**

ABOUT THE PROGRAMME

The Water Quality and Sanitation Outreach Programme is organised under Unnat Bharat Abhiyan (UBA) with the aim of strengthening the role of higher educational institutions in addressing water quality and sanitation challenges at the community level. Kerala largely depends on traditional water sources such as wells, rivers, ponds, and backwaters. High population density and improper environmental planning often result in contamination of drinking water sources, leading to recurring water-borne diseases. The programme adopts a participatory and practice-oriented approach, enabling faculty members to translate technical knowledge into effective village-level interventions. Emphasis is placed on sustainable solutions that can be replicated by participating institutions in their adopted villages.

WHY THIS PROGRAMME MATTERS

Access to safe drinking water and proper sanitation remains a critical challenge in many rural and peri-urban areas of Kerala. Contamination of traditional water sources due to improper environmental planning, poor wastewater management, and lack of awareness continues to pose serious public health risks.

This programme equips higher educational institutions with scientific, technical, and practical tools to support villages in improving water safety, sanitation practices, and community awareness under Unnat Bharat Abhiyan.

OBJECTIVES

- To enhance understanding of water quality parameters, standards, and pollution issues
- Introduction to water testing methods
- To introduce water treatment technologies and remedial measures
- To strengthen institutional capacity for village-level water safety initiatives
- To promote Information, Education and Communication (IEC) activities in adopted villages

SCOPE OF THE PROGRAMME

- Drinking water source protection and maintenance
- Well sanitation and environmental planning
- Water quality testing and interpretation of results
- Introduction to household and community-level treatment systems
- Role of institutions in village-level water safety planning

PROGRAMME HIGHLIGHTS

- Assessment of drinking water quality in rural and peri-urban settings
- Introduction to low-cost and scalable water treatment solutions
- Laboratory demonstrations on water testing and treatment systems
- Environmental planning of buildings to protect water sources
- Support for evidence-based UBA village interventions

PARTICIPANTS

One faculty member from each UBA Participating Institution actively engaged in UBA activities and village-level interventions. Participation is limited to ensure effective interaction and hands-on exposure.

HANDS-ON & PRACTICAL COMPONENTS

- Demonstration of water quality testing using field kits and laboratory equipment
- Familiarisation with RO systems, iron removal filters, slow sand filters, and terafil filters
- Interaction on laboratory setup and operation for institutional water testing facilities
- Case studies from CWRE village-level interventions

ORGANISING INSTITUTIONS

- Regional Coordinating Institute – Unnat Bharat Abhiyan
Kerala Agricultural University
- Centre for Water Research and Education (CWRE)
Jyothi Engineering College, Thrissur

Programme Schedule

Inaugural Sessions

- 09:00 – 09:30 AM : **Registration**
- 09:30 – 09:35 AM : **Welcome Address : Dr. Alwyn Varghese** HOD, Civil Department, Jyothi Engineering College
- 09:35 – 09:40 AM : **Introductory Speech : Shri Akhil G S**, Project Coordinator, UBA, KAU
- 09:40 – 09:45 AM : **Presidential Address : Fr. Dr. Jose Kannambuzha**, Academic Director, Jyothi Engineering College
- 09:45 – 09:50 AM : **Inaugural Address : Dr. Binoo P Bonny**, Director of Extension & Regional Coordinator UBA, KAU
- 09:50 – 09:55 AM : **Felicitation : Dr. Giggin T**, Cocordinator, UBA,KAU
Dr. Sojanlal P, Principal, Jyothi Engineering College
- 09:55 – 10:00 AM : **Vote of Thanks : Dr. Jose Thomas C**. Assistant Coordinator, CWRE UBA

Technical Sessions

- 10:00 – 10:40 AM : Water Pollution, Water Quality Parameters and Standards
Speaker : **Mrs. Anna Joseph**, Assistant Coordinator, CWRE
- 10:40 – 11:00 AM : **Tea Break**
- 11:00 – 12:30 PM : Water Quality Issues in Kerala – Causes, Remedies, and Establishment of Water Testing Laboratories
Speaker : **Prof. M. G. Cyriac**, Coordinator, CWRE
- 12:30 – 01:15 PM : **Lunch Break**
- 01:15 – 02:00 PM : Laboratory Demonstrations – RO Systems, Iron Removal Filters, Slow Sand Filters, Terafil Filters, Water Testing Kits and Laboratory Equipment
Speakers: **Vini P, Suhas Nair, Ignatious, Anna Joseph, Jeffy Johny**
- 02:00 – 02:40 PM : Environmental Planning of Buildings and Surroundings to Protect Water Sources
Speaker : **Mrs. Jeffy Johny**, Department Coordinator, CWRE
- 02:40 – 03:20 PM : Commercial Water Treatment Practices in Kerala – RO, Iron and Hardness Removal, Coagulation and Flocculation Techniques
Speaker : **Prof. M. G. Cyriac**, Coordinator, CWRE
- 03:20 – 03:45 PM : **Valedictory Function and Certificate Distribution**
- 03:45 – 04:00 PM : **Tea Break**