Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachi Bowli, Hyderabad – 500 032. TS, India

ESCI

WATER RESOURCES DEVELOPMENT DIVISION

Continuing Professional Development Programme on

Benchmarking Studies of Water Use Efficiency

17 – 19 August, 2026

(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Execellence

INTRODUCTION

Water Use Efficiency (WUE) is a key indicator for assessing how effectively a precious resource like water is being utilized and for promoting sustainable practices across various sectors. Traditional irrigation methods such as flood irrigation generally have low water use efficiency, ranging from 35–40%, whereas modern irrigation techniques like drip irrigation can achieve efficiencies of up to 95%.

Performance is a measure of the effectiveness and excellence of any system, and the Water Resources Sector is no exception. One of the major objectives of the National Water Mission is to improve water use efficiency by at least 20 percent. Traditionally, water policies, particularly in the irrigation sector, have paid limited attention to the efficient utilization of water resources. Despite the irrigation sector's significant contribution to agriculture—which accounts for nearly 28% of the country's GDP and provides employment to about 67% of the workforce—serious concerns remain regarding its performance and its ability to ensure long-term food security for India.

Indian industries also have a crucial role to play in enhancing water use efficiency and ensuring water security. A reliable and comprehensive database should be developed for each industrial sector, covering aspects such as wastewater generation, treatment practices, available technologies, challenges, gaps, and end-use applications of treated water. Industries should be provided with clear guidelines and performance benchmarks that serve as a roadmap for achieving higher water use efficiency. These benchmarks should be established after considering both technical feasibility and socio-economic factors.

The National Water Policy emphasizes the need to improve the performance of existing water resources infrastructure. In the irrigation sector, performance improvement means achieving greater productivity and efficiency in water use—often expressed as “More Crop per Drop.” Benchmarking of irrigation projects has emerged as a widely accepted tool worldwide for evaluating and improving irrigation system performance. Therefore, funding priorities in the Water Resources Sector should be reoriented to ensure adequate investment in both the development and operation and maintenance of water infrastructure.

Performance improvement requires focused strategies that address critical action areas and unlock the hidden irrigation potential within existing systems. Modernization and renovation of aging irrigation projects, along with the adoption of improved water management practices, are essential for enhancing water use efficiency, increasing agricultural productivity, and ensuring sustainable water resource management.

OBJECTIVE

The programme aims to enhance participants' understanding of water use efficiency, performance benchmarking, and sustainable water management practices. It focuses on improving irrigation and industrial water productivity, promoting modern water-saving technologies, and developing strategies for efficient utilization, modernization, and management of existing water resources infrastructure.

COVERAGE

- Water Governance in India
- Integrated Water Resources Development and Management.
- Water use efficiency in Irrigation Systems.
- Irrigation System: Performance Indicators and bench marking.
- Operation and Participatory Irrigation Management.
- Innovations, Technical Improvements.
- Benchmarking Industrial Water Use Efficiency in India
- Best Practices and Innovative Technologies for Water Management.
- Field Visit.

METHODOLOGY

Course will consist of class room lectures, group discussions, sharing of experiences and Case Studies, which demands full participation of the participants not only as learners but also as knowledgeable practitioners in their own fields.

TARGET PARTICIPANTS

The course is meant for Junior & Middle level engineers of Irrigation, Water Resources, Agriculture, Command Area Development, Public Works Departments of State Govt., High Water Consumption Industries, Research & Development and Officers involved in Water Resources Development and Management.

PROGRAMME VENUE, DATES & TIMINGS

VENUE :

Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachi Bowli, Hyderabad - 500032, Telangana, India.

DATES

17 – 19 August, 2026

TIMINGS

On the first day, registration will commence at 0900 Hrs. On all other days the programme timings will be from 0945 to 1715 hrs with breaks in between for tea and lunch.

COURSE DIRECTOR

Er. G Naresh, M.Tech (Ph.D), MIE
Faculty & Head I/c.
Offfice:040-66304117
Mobile : +918801193075

COURSE FEE

Residential Fee is Rs.18,000/- per participant. Residential fee includes course material, course kit, and twin-sharing / single AC accommodation as per availability, Breakfast, Lunch, Dinner, Tea / Coffee and Snacks.

DISCOUNTS

Non-Residential Fee: 10% discount on course fee is allowed for non-residential participants.

Group Discount: Additional 10% discount for three or more participants if sponsored by the same organization.

(All discounts are applicable only if fee is received at ESCI before the commencement of the programme)

GST @18% as applicable is to be paid extra over and above the training fee, as training is also brought under the purview of Service Tax. **PAN Card No** AAATT3439Q**; GST No** 36AAATT3439Q1ZV under commercial training or coaching services.

Programme fee is to be paid in favour of **"IE(I)-Engineering Staff College of India"** in the form of demand draft payable at Hyderabad.

Alternatively the payment may be made by **Electronic Fund Transfer (EFT)** to ESCI - SB A/c No. 10007111201 with The SBI, PBB, Rajbhavan Road Branch, Khairatabad, Hyderabad-500004 by NEFT/ RTGS/ IFSC Code No. SBIN 0004159 – MICR No.500002075. **While using EFT method of payment, please ensure to communicate us your company name, our invoice reference and programme title.**

REGISTRATION

Online registration shall be available on ESCI website. To register, manually please send your nominations giving details of name, designation, contact address, email address, mobiles no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

Head
Water Resources Development Division
Engineering Staff College of India
Gachi Bowli, Hyderabad – 500 032
Phone: 040 – 66304117 – 9 (Dir.) 23000465 (EPABX): Extn: 4117– 9
Fax: 040 - 23000336
E-Mail : wrd@escihyd.org
Url : www.escihyd.org

CERTIFICATE: A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INSTRUCTIONS

- ESCI encourages participants to present case studies from their respective organizations.
- For the convenience of the outstation participants ESCI will facilitate pickup and drop from Airport / Railway Station/ Bus stations, if travel plans are received at least 3 days in advance along with mobile number by fax or email. The charges shall be paid by the participants directly to the cab.
- ESCI provides complimentary accommodation to participants a day prior to the commencement and after the conclusion of the programme. (Check in at 12:00Hrs) one day after conclusion (Check out at 12:00 hrs) of the programme duration.
- Overstay charges of @ Rs.990/- per day, per head will be charged.
- Well developed Information Centre and internet facilities are available to the participants.