

Engineering Staff College of India Autonomous Organ of The Institution of Engineers (India) Old Bombay Road, Gachi Bowli, Hyderabad – 500 032.

WATER RESOURCES DEVELOPMENT DIVISION

Continuing Professional Development Programme on

Reservoir Sedimentation Impact and Management Strategies

06 - 08 January, 2025





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

Centre for Promotion of Professional Execellence

INTRODUCTION

Among the various components of a water resources systems, reservoirs are the most important. There are about 5334 completed large dams in India. The dams which were constructed long back with the data, design and construction technologies available at that time are to be reviewed in view of the changes in the hydrological inputs, latest design parameters and other technological advancements in terms of Dam Safety Act 2021 and necessary steps are to be taken to sustain the safety of the dams. Soil erosion, transportation and its deposition in reservoirs is a universal phenomenon. Siltation in some of them has impacted their storage capacity thus, limiting economic benefits of these investments. Despite decades of research, sedimentation still probably is a serious technical problem faced by dam engineers.

Proper consideration, assessment and management of sediment-induced problems are an integral and challenging part for a shift towards the concept of safe and sustainable use of reservoirs. Reservoir surveys conducted by Central Water Commission (CWC) indicated that rate of siltation is faster than the anticipated though it is at variance in each case. Problems confronting the project-planner are to estimate the rate of sedimentation and period of time before the sediment will interfere with useful functions of the reservoir. Sufficient provision need to made for sediment storage in the reservoir at the time of design so as not to impair reservoir functions during the designed life of the project. It is therefore, essential to monitor the capacity of existing reservoirs at regular intervals and take suitable measures for controlling the sedimentation rate and utilize the findings in of the planning of future reservoirs. Timely remedial measures are required to be taken to reduce the siltation and to remove silt deposited in order to prolong the useful life of the reservoir.

OBJECTIVE

The proposed Training Programme aims at providing an opportunity to the participants to have the benefit of exchange of ideas through interactions with expert resource persons and co-participants from various parts of the country representing various organizations serving at different levels on the Reservoir Sedimentation and Management Options.

COURSE COVERAGE

- > An overview of Reservoir Sedimentation
- Sampling Analysis and Assessment
- Capacity Surveys of Reservoirs
- > Estimation of Loss of Storage in existing Reservoirs
- Removal of Deposited Sediment from Reservoirs
- Remote Sensing Techniques for Estimation of Sedimentation in existing reservoirs
- Sediment Management Options
- Field Visit

METHODOLOGY

Methodology includes class room lectures with audio visuals, interactive sessions through group discussions, case studies etc. Emphasis would be laid on sharing of experiences of participants and active participation is solicited from the participants. Medium of training is English.

TARGET PARTICIPANTS

The programme is meant for all level Engineers from Water Resources, Irrigation, Hydro Power, Flood Control and Soil Conservation Departments.

PROGRAMME VENUE

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

DATES

06 – 08 January, 2025

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. M. Rajasekhar Reddy, M.E, FIEFormer – Chief Engineer

Panchayat Raj Engg. Dept., Govt. of Telangana

Senior Faculty and Head

Contact details: 040-66304117 (D)

Er. G Naresh, M.Tech (Ph.D), MIE

aculty

Mobile: +918801193075

COURSE FEE

Residential Fee is Rs.16,500/- 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. **PAN** Card No AAATT3439Q; **GSTIN** 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, mobile, telephone and fax numbers of the participant along with the details of mode of payment of fee, addressed to: wrd@escihyd.org

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.