



Administrative Staff College of India  
Leadership through Learning



Online Certification Course on  
**LEADERSHIP DEVELOPMENT FOR**

# **CITY-WIDE INCLUSIVE SANITATION**

Advancing the achievement of sanitation goals  
under SDG 6, SBM 2.0 & AMRUT 2.0

**COHORT - 4 | 10 SEPTEMBER – 26 NOVEMBER 2022**

Course Booklet



# COHORT-4



## About the Course

Lack of proper sanitation is a long-running development issue that remains stubbornly difficult to resolve. Cities in South Asia face a large burden of untreated faecal waste entering the environment causing public health and environmental risks.

City-wide inclusive sanitation (CWIS) looks to shift the urban sanitation paradigm and prioritizes equity, public and environmental health, and co-existence of a range of solutions – sewered and non-sewered, centralized and decentralized - tailored to the requirements of the cities. CWIS focuses on service provision and its enabling environment, and not on building infrastructure alone.

This ASCI-ADBI course aimed to develop skilled urban professionals equipped with a practical and comprehensive understanding of CWIS by amalgamating global knowledge and best practices with on-field implementation experiences in South Asia. It provided a step-by-step approach to the safe, inclusive, and sustainable management of sanitation in South Asian cities. The course was particularly helpful for professionals working towards achieving sanitation goals under SDG 6, SBM 2.0 and AMRUT 2.0.



## Core Objective of the Course



The main objective of the course was to equip urban practitioners with knowledge and skills to contribute to the practice and research in city-wide inclusive sanitation. It aimed to build a cadre of sanitation professionals to take a leadership role in the sector.

## Course Outcomes



Evaluate the complexity of urban sanitation and its impact on health, the environment, people, and economy



Critically examine policy and regulatory frameworks for achieving universal, pro-poor, and gender inclusive sanitation in urban areas, with a focus on non-sewered/faecal sludge and septage management



Describe the principles of city-wide inclusive sanitation and pathways for implementation



Demonstrate knowledge of faecal sludge and septage management technologies across the sanitation value chain



Apply tools and frameworks for sustainable sanitation planning, funding, implementation, and monitoring



Create a practical action plan for city-wide inclusive sanitation in urban areas of varying size and nature



Ideate and formalize innovations and social enterprises to support city-wide inclusive sanitation implementation at scale



A 3 day study tour of best practices in Telangana provided a deeper understanding of CWIS through field visits, demonstrations, and interactions with key stakeholders

# Course Coverage

The course covered the following modules:

## MODULE 1

### Overview of Urban Sanitation and Introduction to FSSM



- Overview of urban sanitation: context and challenges
- Sustainable Development Goals linked to sanitation and their implications on India
- Importance of Faecal Sludge and Septage Management (FSSM) and Non-sewer sanitation (NSS)
- Sanitation Value Chain (SVC) and impact of safe sanitation on environment and public health

## MODULE 2

### City-Wide Inclusive Sanitation (CWIS) for achieving Urban Sanitation SDGs



- Understanding the principles of City-Wide Inclusive Sanitation (CWIS)
- Review of national and international best practices in CWIS

## MODULE 3

### Environmental Standards and Strategies for Compliance



- Environmental laws, regulations, and discharge standards related to wastewater & faecal sludge
- Characteristics of faecal sludge
- Sampling and laboratory methods for waste characterization

## MODULE 4

### Integrating a Gender Perspective in Sustainable Sanitation



- Integration gender in sanitation policy and implementation
- Institutional mechanisms for gender equity in sanitation access, decision making and service delivery
- Designing gender inclusive sanitation facilities
- Sanitation livelihoods and entrepreneurship for women

## MODULE 5

### Frameworks and Tools for Sanitation Planning



- FSSM Planning Framework
- FSSM Toolbox
- Shit Flow Diagram: Mapping Sanitation situation
- Sanitation Risk Assessment

## MODULE 6

### Designing Onsite Sanitation Systems – Containment



- Safe on-site containment systems: Design guidelines
- Integration of toilet containment in building permission regulations
- Low cost sanitation systems - Small bore sewer system, Shallow sewer system, Re-invent toilet etc.
- Science and technology for wastewater management (black water and grey water, pollution load, pollution load reduction planning, eutrophication and counter measures, on-site wastewater treatment technology for pollution load reduction and measures against eutrophication, etc.)
- Onsite wastewater treatment systems (Johkasou and similar on-site wastewater treatment systems)

## MODULE 7

### Designing Onsite Sanitation Systems – Emptying and Transportation



- Regulations & Monitoring of desludging activities
- Mechanical desludging processes
- Safety and wellbeing of sanitation work force
- Importance and economics of Scheduled desludging

## MODULE 8

### i.school Workshop on Social Business Enterprise Development



- Development of social business for FSM reuse

## MODULE 9

### Design and Selection of Processing and Treatment Technologies



- Technology options for treating Faecal sludge: Standalone plants, co-treatment of septage in STPs
- Design approach
- Technology selection
- Environmental permits & discharge norms
- Operations & Maintenance of Treatment plant
- Reuse market of treated biosolids and wastewater
- Best Practices and Implementation experiences

## MODULE 10

### Art and Science of Affecting Sanitation Behaviors



- Developing Behavior Change Communication strategy and implementation plan
- Case studies of BCC campaigns roll out
- Impact Assessment of Communication campaigns

## MODULE 11

### Protocols for Monitoring, Evaluating and Benchmarking to Promote Learning



- Sanitation monitoring frameworks – Global and national
- MLE tools
- CWIS monitoring dashboard
- Developing an FSSM Action plan for a city

## MODULE 12

### Strategic Approaches and Sources for Financing FSSM



- Estimating life cycle cost of FSSM
- Tools for financial planning
- Financing models
- Public Private Partnership Models in FSSM

## MODULE 13

### Sustaining City Wide Inclusive Sanitation



- Accountability in City-Wide Inclusive Sanitation
- Role of Monitoring and Evaluation in accountability
- Development of City Sanitation Service Delivery Plan
- Climate resilient planning for CWIS
- Interactions with political leaders on gaining public and peer support for giving equitable water and sanitation services







## Pedagogy

The course was delivered online using a combination of pedagogical approaches comprising:



**Self-study of course materials requiring approximately**

**4 hours per week**

The course materials comprised policy notes, best practice videos, handbooks, and a slide deck for every module. Weblinks to other relevant literature were provided for additional reading.



**Experience sharing and direct interaction series**

**for 2 hours duration every week**

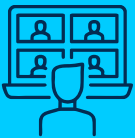
The participants would benefit from listening to lectures and panel discussions by experts on topics of global relevance every week, usually on a Wednesday and Saturday. The participants interacted with the experts, shared their experiences and have extensive discussions during questions and answers slot after every session. A range of technology tools (mentimeter, slido etc) were used to make the sessions participative.

## Social Innovation Workshops



The participants learned about establishing a social business for FSSM through a unique innovation education program started in 2009 at The University of Tokyo by i.school. The i.school's innovation workshop methodology was a useful skill for capacity building and supporting the ongoing initiatives of social issue problem-solving. It mainly used analogical thinking and cognitive techniques to develop the right mindset and skillset. The participants enjoyed the process and it helped them to think in a different way to confidently come up with new ideas. The structured discussions served to change the mindset of participants and contributed to changing the way of engaging with these problems. A workshop of 3-hour duration was conducted with a focus on learning the process of ideating and implementing innovative solutions for social issues with a human-centered approach. The online workshops were conducted using Zoom and APISNOTE, a WEB tool for digital sticky notes.

## Discussion forums



A discussion forum was active for the entire duration of the course to facilitate detailed discussions, doubts clarification, and interaction between participants and the course instructors. Additionally, topical discussion forums were created by the participants for detailed exchanges on specific topics of interest. Topics ranged from technology to softer aspects such as leadership skills, time management, team building, stakeholder management, media management, negotiations etc.

## Group interactions & Peer learning



Breakout rooms were made available for small group interactions on specific areas of interest. These were guided by the course coordinator. The breakout rooms were useful for discussing various CWIS initiatives, implementation challenges, and problem solving.

## Action Plan development



Each participant developed an action plan of their own city/state/region for achieving CWIS principles. This enabled them to check on the status of their city functioning in terms of CWIS indicators. The plan was prepared with short term and medium term deliverables for achieving CWIS in their cities. Participants were given feedback by their peers and course directors to refine the action plan.



# Participant Profile

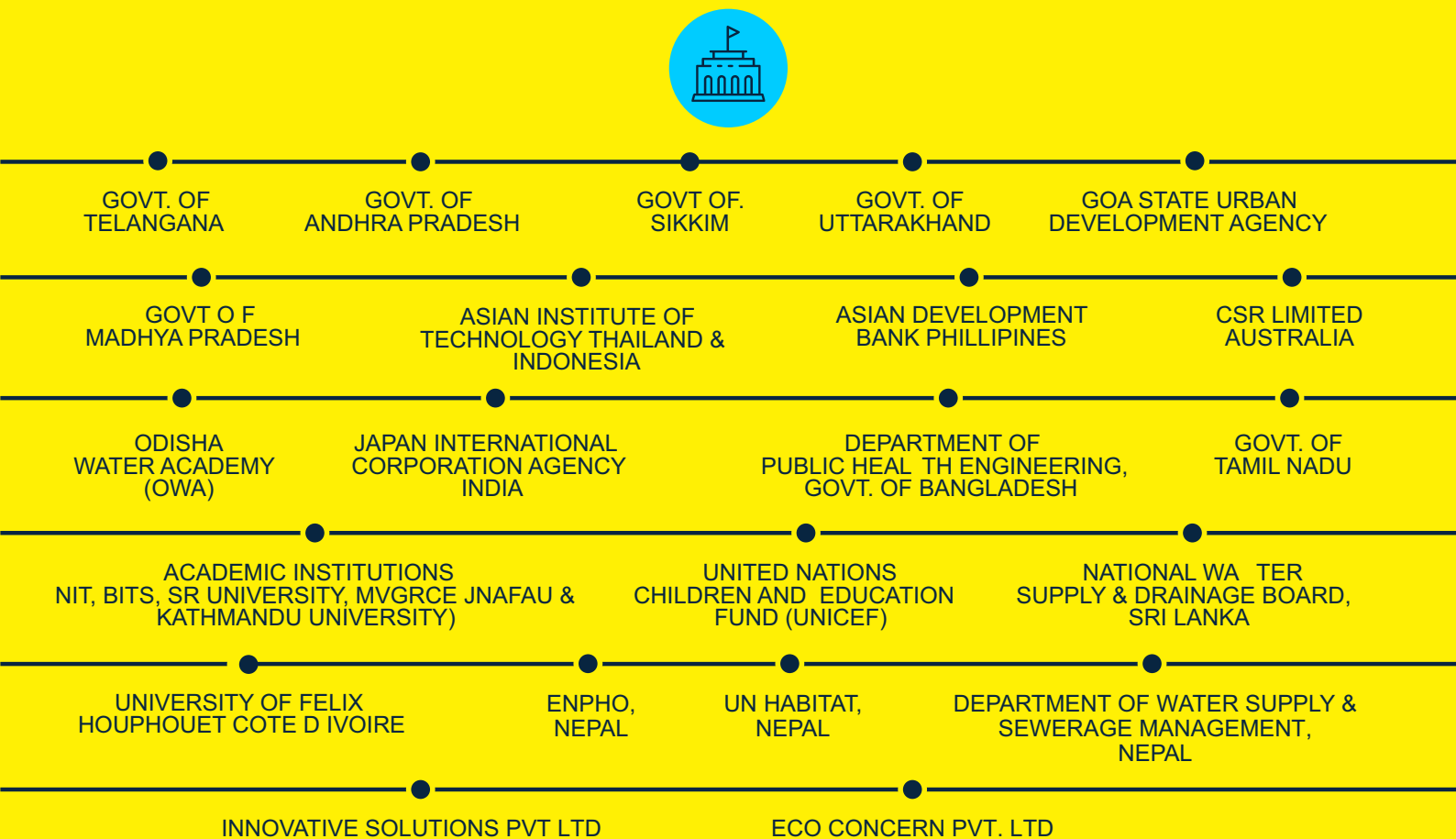
This course is a part of the ASCI – ADBI partnership to build a cadre of sanitation professionals to take up a leadership role in the sector. The first three cohorts of the program were held in 2020, 2021 & early 2022 with 45, 103 & 96 participants respectively. The course was successful in building change champions who can bring impact and are beneficial to the sector. Motivated by the success, the fourth offering of the program was announced in the month of June 2022. A phenomenal response was received with more than 200+ applications from city, state & national level representatives and urban practitioners from diverse organizations and diverse countries. The diversity of professionals has grown than in the past cohorts. Detailed interviews were held with the applicants to understand their motivation for applying, expectations from the course, and willingness to devote time and actively participate over the entire duration of the course. The free-flowing conversations also helped in assessing the applicant’s current and intended involvement in driving positive change in sanitation service delivery in India.

The stringent screening process led to the selection of **122 candidates** who are sure to emerge as sanitation change champions. These participants forming Cohort-IV of this online certificate course have expressed tremendous commitment to join the course despite their busy schedules.

The participant profile of Cohort-IV is as below:

## Representation of the participants

Our participants majorly included city, state and national level representatives spanning from 13 states of India (as shown in the figure below) and 33 overseas participants from Bangladesh, Nepal, Sri Lanka, Philippines, Australia, Thailand, Indonesia and Africa. The representation of the participants from is shown below.





## Work experience and Roles of the participants

The participants included officers from the central, state & city level, urban practitioners from the private sector and academicians from educational and research institutions. Mixed representation was seen in terms of their role and experience levels. About 70% of the participants were senior-level professionals with more than 5 years of experience.

Senior-level officials included Gol representatives, DPHE Bangladesh Engineers, MOWS Engineers engineers & advisors; city commissioners; and academicians, etc. Middle-level staff included city engineers, sanitary inspectors, sanitation department officials and executive officers. Academics and researchers also formed a part of this cohort. All the participants are directly or indirectly involved in sanitation and their specific role composition is given in the figure below.



### Years of Work Experience



### Designations & No of Participants



All the participants in the cohort are directly involved in sanitation sector. Most of them head the sanitation department or activities which include planning, execution, monitoring to supervision and coordination between the departments and officials. Some of the participants are also involved in maintaining and monitoring the Management Information Systems (MIS) portals and conducting Information Education and Communication (IEC) programs and behavior change communication campaigns.

We are proud of our CWIS change champions and look forward to learning about their initiatives and progress towards safe, equitable and sustainable sanitation.



# Course Directors



**Prof.V.Srinivas Chary**

Director,  
Centre for Environment,  
Urban Governance, and Infrastructure  
Development (CEUG&ID), ASCI



**Dr.Rajarshi Banerjee**

Asst. Professor,  
Centre for Environment,  
Urban Governance, and Infrastructure  
Development (CEUG&ID), ASCI



**Dr.K.E.Seetha Ram**

Senior Consulting Specialist  
for capacity building  
and training projects,  
ADBI

# Course Coordinators



**Ms.D.Jyothsna Devi**

Senior Research Fellow,  
ASCI



**Mr.Avinash Aruri**

Senior Research Associate,  
ASCI



**Mr.Manjusha Manchala**

Senior Research Associate,  
ASCI



**Ms.Santi Setiawati**

Research Associate,  
ADBI



**Mr.Dwiky Wibowo**

Research Associate,  
ADBI

# Resource Persons Page-1



**Ms. Alyse Schrecongost**

Senior Program Officer-WSH  
Bill & Melinda Gates Foundation



**Prof. Hidetoshi Kitawaki**

Faculty of Global & Regional studies,  
Toyo University



**Dr. Najib Lukoya**

Urban Environment, Water and  
Sanitation Management Specialist



**Mr. Niladiri Chakaraborthi**

Senior Specialist,  
IIHS



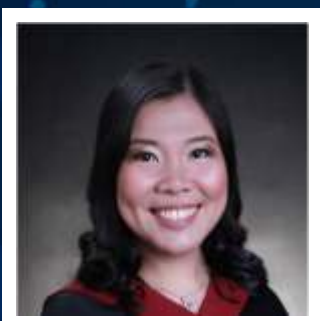
**Ms. Eva Mary**

Program Coordinator  
FSM Alliance



**Mr. Ramkrishna Paul**

Senior Consultant,  
Athena Infonomics



**Ms. Graziel Salazar**

Project Coordinator, ADB's  
Water Sector Group



**Dr. Malini Reddy**

Director - WASH (South Asia)  
Athena Infonomics



**Mr. Aaim Mansuri**

Senior Program Lead,  
CEPT University



# Resource Persons Page-2



**Mr. Dorai Narayana**

Consultant,  
Former HoD, IWK



**Dr. Santanu Rath**

Director  
Odisha Water Academy



**Ms. Anju Dwivedi**

Associate Fellow  
Centre for Policy Research



**Mr. Sun Gil Kim**

Senior Program Officer  
BMGF



**Mr. K. Srikar**

Director,  
Revolve Engineers Private Limited



**Mr. Kalyan Kumar Rath**

OAS, Special Secretary,  
Department of Housing & Urban Development  
Govt. of Odisha



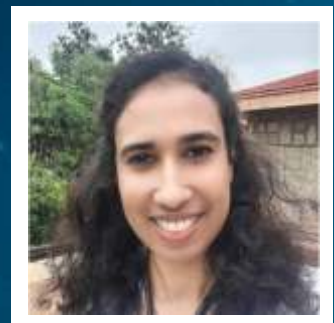
**Dr. Kazushi Hashimoto**

Adviser,  
Japan Sanitation Consortium



**Ms. Namita Banka**

MD,  
Banka BioLoo Limited



**Dr. Pratibha Ganesan**

Asst. Professor, CEUG&ID  
ASCI

# Resource Persons Page-3



**Mr. Tamseel Hussain**

CEO,  
People Like Us Create (PLUC)



**Mr. Venkat Puranam**

Consultant, Water &  
Waste Water Management



**Mr. Ganges Reddy**

Founder & CEO  
Bluedrop Enviro Pvt Ltd



**Mr. Abhishek Nath**

CEO,  
Ixora Corporate Services Limited



**Prof. Srikanth Mutnuri**

Professor, Applied and Environmental  
Biotechnology Laboratory - Dept. of  
Biological Sciences



**Ms. Varinder Gambhir**

Director - Research  
BBC Media Action



**Mr. Vinod Achanta**

Founder, DIAS Works  
Consulting Firm (Brand & IT)



**Mr. Md. Tanvir Ahmed**

Sanitation Business Advisor  
SNV, Bangladesh



**Mr. Harish Babu**

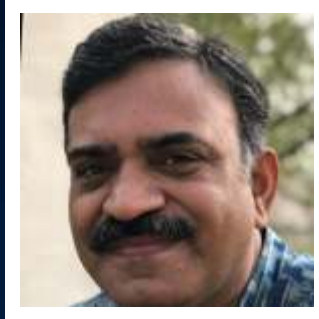
AVP - Business Development  
Banka Bioloo

# Resource Persons Page-4



**Mr. Manas Rath**

Adviser,  
BORDA



**Dr. Suresh Kumar Rohilla**

Programme Lead  
International Water Association



**Dr. Arne Raj Panesar**

Lead - Sustainable Sanitation Sector  
Program, GIZ



**Mr. Anand Madhavan**

Partner, Special Situations Group  
KPMG Media



**Mr. Pierre Flamland**

Manager  
Japan Sanitation Consortium (JSC)



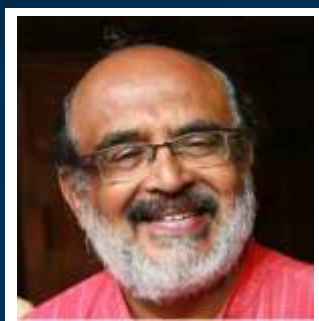
**Dr. Sneha Latha**

Associate Professor  
ASCI



**Dr. Bhushan Raj Srestha**

Managing Director  
Innovative Solution Pvt. Ltd. Nepal.



**Dr. Thomas Isaac**

Former Minister of Finance  
Govt. of Kerala



# Participants Page-1

## Sarika Pradhan

Spl. Secy sum Mission Director,  
SBM (G) Govt. of Sikkim

## Yangchen Doma Lepcha

Jt. Director, SIRD & PR  
Govt. of Sikkim

## Binod Sharma

Asst. Eng., RDD  
Govt. of Sikkim

## Sameer Rai

Senior Architect, Urban development  
department, Govt. of Sikkim

## Chandra Bahadur Manger

Faculty, SIRD & PR  
Govt. of Sikkim

## Amit Anant Shirodkar

Assistant Engineer  
Goa State Urban Development Agency

## Dr.G.Shyamala

Professor,  
SR University

## Dr.Venkata Ravi Sankar Cheela

Assistant Professor,  
MVGRCE

## Dr.P.Shirisha

Assistant Professor,  
KITS Warangal

## Gaurish Govind Phadte

Junior Engineer (Civil Engineer, CLTC)  
Goa State Urban Development Agency

## Rajesh Manandhar

WASH Coordinator  
UN-Habitat Nepal

## Sudha Shrestha

National Professional Officer /  
WASH Urban Basic Services Section  
UN-Habitat Nepal

## Subash K. C.

Lead Trainer - CWIS Scaling and  
Sanitation Innovation Project  
ENPHO Nepal

## Chandra Shova Khaitu

Curriculum Development Officer and  
Knowledge Management  
ENPHO Nepal

## Thota Eswar kumar

Ward Amenities Secretary & GSWS  
Vijayawada Municipal Corporation

## Vinta chandra sekhar reddy

Ward Amenities Secretary  
Vijayawada Municipal Corporation

## Baji shaik

Ward Sanitation & Environment Secretary  
Vijayawada Municipal Corporation

## Eagala Jayasri

Ward Sanitation & Environment  
Secretary, Vijayawada Municipal  
Corporation

## Kabita Bade Shrestha

Data Analytics Expert  
Innovative Solution Pvt. Ltd. Nepal

## Shailesh Bahadur Shrestha

GIS Expert  
Innovative Solution Pvt. Ltd. Nepal

## Farhana Haque Rich

Executive Engineer, Department of  
Public Health Engineering  
DPHE Bangladesh

## Tasnim Tamanna

Executive Engineer  
DPHE Bangladesh

## Faiza Haque Toma

Executive Engineer  
DPHE Bangladesh

## Bilkis Aktar

Executive Engineer  
DPHE Gazipur, Bangladesh

## Nadia Ferdousi

Executive Engineer  
DPHE, Rajbari, Bangladesh

## Roman Kabir

Executive Engineer  
DPHE Bangladesh

## Md. Fayed Ahmed

Executive Engineer  
DPHE Bangladesh

## Sarder Shamsul Islam

Executive Engineer  
DPHE Bangladesh

## Shahana Alam

Executive Engineer  
DPHE Bangladesh

## Bashir Ahammed

Executive Engineer  
DPHE Bangladesh

## Shaila Shahid

Chief Operating Officer (COO),  
Disaster Climate Change Support Unit,  
CWIS-FSM Support Cell  
DPHE Bangladesh

## Md. Tawhidur Rahaman

Technical Expert at  
CWIS-FSM Support Cell  
DPHE Bangladesh

## Monzur Morshed

Business Expert,  
CWIS-FSM Support Cell  
DPHE Bangladesh

# Participants Page-2

**Abdullah Al-Muyeed**

Chief Operating Officer,  
City Support Unit, CWIS-FSM  
Support Cell, DPHE Bangladesh

**Pankaj Kumar Saha**

Executive Engineer  
DPHE Bangladesh

**Mohammad Abdul Alim Gazi**

Executive Engineer  
DPHE Bangladesh

**Md.Khaleduzzaman**

Executive Engineer  
DPHE Bangladesh

**Muhammad Mashiur Rahman**

Executive Engineer  
DPHE Bangladesh

**Mohammed Mosleh Uddin**

Executive Engineer  
DPHE Bangladesh

**Md. Ibne Mayaz Pramanik**

Executive Engineer  
DPHE Bangladesh

**Thilina Dissanayake**

Engineer (Sewerage), Water Reclamation  
Section, National Water Supply & Drainage  
Board, Sri Lanka

**Thrishan Hettiarachchi**

Civil Engineer, Greater Colombo Water  
Reclamation National Water Supply & Drainage Board,  
Sri Lanka

**Siddarth Pradhan**

Technical Officer  
CSR Limited, Australia

**T. P. Sreejani**

Assistant Professor,  
Department of Civil Engineering  
MVGR College of Engineering, Vizianagaram

**S Purushotham Rao**

Assistant Professor,  
Department of Civil Engineering  
MVGR College of Engineering, Vizianagaram

**Dr Supratim Ghosh**

Assistant Professor, Dept. of Biological  
Sciences, BITS Pilani Hyderabad

**Dr R Gobinath**

Professor  
SR University

**Dr.K.Rajesh Kumar**

Associate Professor  
SR University

**J.Nagendra kumar**

Asst.prof. Department of Civil  
engineering Swarnandhra College of  
Engineering & Technology

**John Bunnian**

Asst.prof. Department of Mechanical  
engineering Swarnandhra College of  
Engineering & Technology

**Ajith Tiwari**

Sub Engineer, Budni  
Govt. of Madhya Pradesh

**Deepak sharma**

Asst. Engineer, Sehore  
Govt. of Madhya Pradesh

**Anil Kumar**

Executive Engineer, Vidisha  
Govt. of Madhya Pradesh

**Richa bhadouria**

Sub Engineer, Vidisha  
Govt. of Madhya Pradesh

**Pankaj Sharma**

Sub Engineer, Dharampuri  
Govt. of Madhya Pradesh

**Ramesh Chandra hirve**

Sanitary Insepctor, Barwala  
Govt. of Madhya Pradesh

**Beer Singh Mahte**

Health Officer, Pithampur  
Govt. of Madhya Pradesh

**Priyanka Patel**

Chief Municipal officer, Kargone  
Govt. of Madhya Pradesh

**Adesh Jain**

Sub Engineer, Murwara  
Govt. of Madhya Pradesh

**Sambhav Ayachi**

Assistant Commissioner  
(Swachhta Cell Prabhari), Jabalpur  
Govt. of Madhya Pradesh

**Shashank Gautam**

Asst. Nodal, Singrauli  
Govt. of Madhya Pradesh

**Arpna Giri**

Sub Engineer, Neemuch  
Govt. of Madhya Pradesh

**Suresh Chandra Vyas**

Executive Engineer, Ratlam  
Govt. of Madhya Pradesh

**Javed Qureshi,**

Sub Engineer, Ujjain  
Govt. of Madhya Pradesh

**Sourabh Tripathi**

Assistant Engineer, Dewas  
Govt. of Madhya Pradesh

**Marije Broekhuijsen**

WASH Specialist  
Unicef India

# Participants Page-3

**Prabhakar Sinha**

WASH Specialist  
Unicef Patna

**Ontari Sudhakar Reddy**

WASH Officer  
Unicef Patna

**Nagendra Prasad Singh**

WASH Specialist  
Unicef Lucknow

**Rajeev Kumar**

WASH Officer  
Unicef Patna

**Pratik Mishra**

FSSM technical expert – TSU  
Unicef Raipur

**David Rajbangshi**

IEC Expert, TSU Raipur  
Unicef Raipur

**Ajay B Singh**

FSSM Team Lead – TSU  
Unicef Ranchi

**Saroj Kant Chowdhury**

IEC-Expert (FSSM)-Technical Support Unit  
to State Urban Development Authority  
(SUDA-Ranchi), Unicef Ranchi

**Mukesh Kumar**

Govt of Uttarakhand

**Sanjay Singh**

Executive Engineer, Jal sansthan  
Govt of Uttarakhand

**Naresh Pal Singh**

Executive Engineer, Jal sansthan  
Govt of Uttarakhand

**Suryabarti Majhi**

Project Engineer,  
OWSSB-cum-Addl Director,  
Odisha Water Academy

**Aspruha Swain**

Associate Manager (Technical)  
Odisha Water Academy

**Mafalda Araujo Mendes Pinto**

Young Professional, Water Sector Group,  
Sustainable Development and Climate  
Change Department, Asian Development Bank

**Maria Kato**

Representative,  
JICA India Office

**K.Dinesh Kumar, IAS**

Municipal Commissioner,  
Rajahmundry,  
Govt. of Andhra Pradesh

**G.Surya Sai Praveenchand IAS**

Municipal Commissioner, Kadapa  
Govt. of Andhra Pradesh

**A.Bhargav Teja IAS**

Municipal Commissioner, Kurnool  
Govt. of Andhra Pradesh

**D Haritha IAS**

Municipal Commissioner, Nellore  
Govt. of Andhra Pradesh

**Ch Keerthi IAS**

Municipal Commissioner, Guntur  
Govt. of Andhra Pradesh

**U Sarada Devi**

Municipal Commissioner, Mangalagiri  
Govt. of Andhra Pradesh

**A.Srividya**

Municipal Commissioner, Dachehalli  
Govt. of Andhra Pradesh

**N Kiran Kumar**

COO Swachh Andhra Corporation  
Govt. of Andhra Pradesh

**K.Hephzi Jones**

Project Associate – PMU  
Swachh Andhra Corporation  
Govt. of Andhra Pradesh

**A.Sravani**

Project Associates  
Swachh Andhra Corporation  
Govt. of Andhra Pradesh

**Mallela Srinivasarao**

Environmental Engineer,  
Khammam Municipal Corporation  
Govt of Telangana

**MD Shoebuddin**

Environmental Engineer,  
Nizamabad Municipal Corporation  
Govt of Telangana

**Jangam Sampath**

Sanitary Inspector,  
Greater Warangal Municipal Corporation  
Govt of Telangana

**Sampath**

Environmental Engineer, Manikonda  
Govt of Telangana

**T Prasad Rao**

Sanitary Inspector, Bhongir  
Govt of Telangana

**K Swamy**

Environmental Engineer,  
Kaimnagar Municipal Corporation  
Govt of Telangana

**Anil Kumar**

Environmental Engineer, Shamshabad  
Govt of Telangana

**K Satish Kumar**

Sanitary Inspector, Siddipet  
Govt of Telangana



# Participants Page-4

**Birendra Kandel**

Senior Divisional Engineer  
Department of water supply &  
sewerage management, Nepal

**Charushree Nakarmi**

Consultant  
Eco Concern Pvt. Ltd.

**R Krishnan**

Executive Officer  
Kurinjipadi Town Panchayat, Tamil Nadu

**K Guhan**

Executive Officer  
Thalainayar Town Panchayat,  
Tamil Nadu

**S Sethu Ramalingam**

Junior Engineer  
Sankar Nagar Town Panchayat, Tamil Nadu

**K Vijayaraj**

Junior Engineer  
Thenkarai Town Panchayat,  
Tamil Nadu

**M Santhosh Kumar**

Junior Engineer  
Amoor Town Panchayat, Tamil Nadu

**Kouassi DONGO**

Professor & Senior Scientist  
University of Felix Houphouet,  
Cote D Ivoire

**Abdul Jabbar M**

ME (Environmental Engg) Chennai  
Govt. of Tamil Nadu

**PR Riyas**

ME (Structural Engg) CTP 1  
Govt. of Tamil Nadu

**R Jeya Prakash**

ME (Structural Engg) CTP 2  
Govt. of Tamil Nadu

**Pavithra R**

ME (Environmental Engg)  
Chengalpattu  
Govt. of Tamil Nadu

**N. Sivaraman**

ME (Environmental Engg) Vellore  
Govt. of Tamil Nadu

**RS Ramkumar**

ME (Environmental Engg) Thanjavur  
Govt. of Tamil Nadu

**N Jagadesh**

ME (Environmental Engg) Salem  
Govt. of Tamil Nadu

**T Mahendran**

ME (Environmental Engg) Thiruppur  
Govt. of Tamil Nadu

**Srithar .B**

ME (Environmental Engg) Madurai  
Govt. of Tamil Nadu

**D Ramesh**

ME (Environmental Engg) Thirunelveli  
Govt. of Tamil Nadu

**Upender Reddy**

Joint Director, CDMA  
Govt. of Telangana

**Vivek Pandey**

Project Manager WSH  
BMGF ICO-WSH

**RICHA KARKEE**

Manager  
Violence Prevention Services, Canada

**Ida Bagus Hendra Gupta**

Staff, EECC  
Asian Institute of Technology Indonesia

**Suraj Pradhan**

Engineering & Management  
Asian Institute of Technology

**Kavinda Gunasekara**

Chief Operating Officer | Manager  
Asian Institute of Technology

**Kim Tupaz**

Technical coordinator  
Asian Institute of Technology Thailand

**P Sunanda**

PMU Team Lead  
Swachh Andhra Corporation  
Govt. of Andhra Pradesh

## Administrative Staff College of India

BellaVista, Raj Bhavan Road, Khairatabad,  
Hyderabad – 500082, India.



[www.cwis-asci.org.in](http://www.cwis-asci.org.in)

✉ [cwis.asci@gmail.com](mailto:cwis.asci@gmail.com)

☎ +91 92486 30317