



## ORGANISERS

**National Institute of Urban Affairs (NIUA)** was established in 1976, National Institute of Urban Affairs (NIUA) was tasked to bridge the gap between research and practice on issues related to urbanization, and suggest ways and mechanisms to address urban challenges in the country. For more than 40 years now, NIUA has been the vanguard for contributing to, and at times, building the urban narrative for a fast-evolving urban India. The institution has been actively working on bringing forth key areas of concern for urban India in order to build the discourse at various urban scales.

**The Regional Centre for Urban & Environmental Studies (RCUES), Lucknow** was established in the year 1968 by the Ministry of Housing and Urban Affairs, Government of India to address the Research and Training needs of the constituent states. It is one of the premier Centres in the country set up with the objective to bridge the gap between research and practice. RCUES Lucknow has been working towards a better urban & environmental future. Its mission is to help urban local governments in achieving Sustainable Urban Development through a holistic approach. Mandated by the Ministry of Housing and Urban Affairs, Government of India to address the concerns of urban managers and enhancing their capacity by ways of research and trainings. For close to fifty years, RCUES Lucknow has been working in various States throughout the country, focusing on building a brighter future for towns and cities.



### Background:

According to Census 2011, India's urban population is 377 million or 31% of the total population, which is expected to increase to 600 million by 2031. The Census 2011 also showed that in 4,041 statutory towns, 7.90 million households (HHs) do not have access to toilets and defecate in the open. As per Global level data only 5% of fecal sludge is properly treated. Nearly 500 million people in India, using non sewerred systems, do not have access to any treatment of fecal sludge. Untreated faecal sludge and septage management from towns and cities is one of the major causes of surface and ground water pollution in India. The Increase in access to sanitation under Swachh Bharat Mission brought about an evident need to address the emerging liquid waste management challenges. In India, a majority of the household depend on onsite sanitation facilities wherein, safe management of human waste, which includes its safe containment, transport, treatment and disposal is of utmost importance to make our cities healthy and liveable. Most on-site sanitation systems (OSS) are emptied manually in absence of suitable facilities. Ideally a septic tank system should be desludged every 2-5 years.

### Course Summary:

The program will cover engineering and technology aspects of Septage and Liquid Waste Management. Examples and experience of various projects in the form of case studies used to help participants engage with the technical / practical aspects of the plan, implementation and monitoring of elements of full range of Urban Sanitation.



## ONLINE WORKSHOP

### National Institute of urban Affairs (NIUA)

1st and 2nd Floor, Core 4B, India Habitat Centre, Lodhi Road, New Delhi, Delhi 110003



### Regional Centre for Urban & Environmental Studies, Lucknow (RCUES)

Adjacent Registrar's Office, Lucknow University Campus, Lucknow- 226007 Ph: 0522-2740-165, 2740-382, Fax: 0522-2740-165 Email: rcueslucknow@gmail.com www.rcueslucknow.org



# ONLINE TRAINING PROGRAM ON FECAL SLUDGE & SEPTAGE MANAGEMENT

Date: 8<sup>th</sup> September 2020 Time: 02:30 pm to 05:00 pm

## COURSE MODULES:

### MODULE 1

Introduction about the programme  
02:30 PM to 03:00 PM

Mr. Ajit Kumar Mishra, Assistant Director,  
RCUES, Lucknow

### MODULE 2

Technology Options for Faecal Sludge and  
Septage Management and their Principles  
03:00 PM to 04:00 PM

Mr. Saurabh Kale, Sr. Project Management  
and Trainer at Ecosan Services Foundation  
(ESF)

### MODULE 3

Introduction of Centralized and  
Decentralized System  
04:00 PM to 05:00 PM

Mr. Dhawal Patil, General Manager, Ecosan  
Services Foundation

## **Contact Details of Course Coordinators:**

**Mr Ajit Kumar Mishra**, Assistant Director,  
RCUES Lucknow  
[ajit.rcueslko@gmail.com](mailto:ajit.rcueslko@gmail.com)

**Mr Hari P Hihyvanishi**, Senior Programme  
Officer  
NIUA, New Delhi

## PARTICIPANTS:

Training Program on Septage and Liquid Waste Management is organized for Engineers working in the Office of ULB, Jal Nigam, Parastatal Agencies responsible for execution and implementation of projects.

## OBJECTIVES:

- To create awareness on the policies/guidelines and practices about Septage and Liquid Waste Management.
- To develop an understanding of different technological options (along the value chain, but focusing on treatment)
- To understand the decision making criteria for technological selection.

## EXPERTS:



Saurabh Kale is working as Sr. Project Management and Trainer at Ecosan Services Foundation (ESF) and is a co-founder – director of Saniverse Environmental Solutions. With his core background in Environmental Engineering, he is a professional who works in the WASH sector with multi-disciplinary and sustainable approaches. He is one of the lead trainers under Sanitation Capacity Building Platform hosted by National Institute of Urban Affairs. He has over 7+ years of experience in the field of solid and liquid waste Management (SLWM) has worked on city sanitation plans, integrated wastewater and septage management plan and DPRs for Faecal sludge and septage management and solid waste management in India.



Dhawal Patil is a practitioner in the field of sustainable sanitation and water management for close to ten years. He has a master degree in Hydro Science and Engineering from Technical University of Dresden, Germany. His work experience consists of working in non-profit organization Ecosan Services Foundation and a startup Saniverse Environmental Solutions conceptualizing, planning and executing projects pertaining to solid and liquid waste management at various scales.