



सत्यमेव जयते

REGIONAL CENTRE FOR URBAN & ENVIRONMENTAL STUDIES, LUCKNOW

(MINISTRY OF HOUSING & URBAN AFFAIRS, GOVT. OF INDIA)

NEWSLETTER

(Quarterly Publication)

October - December 2022



Adjacent Registrar's Office, Lucknow University Campus, Lucknow, Uttar
Pradesh- 226007. 2740165

E-mail: rcueslucknow@gmail.com Website: www.rcueslucknow.org





Regional Centre for Urban & Environmental Studies (RCUES) Lucknow is one of the four centers in the country established by the Ministry of Housing and Urban Affairs, Government of India at Lucknow in the year 1968. The Regional Centre provides expertise, advisory services & consultancy services to urban local bodies and Parastatals. The Centre has completed its 50 glorious years and continues to perform its activity as Centre of Excellence.

Sri Manoj Joshi IAS,

Secretary,

Ministry of Housing and Urban Affairs, Government of India &

Chairman National Review & Monitoring Committee, RCUES Lucknow

Shri Amrit Abhijat IAS

Principal Secretary,

Urban Development Department, Government of Uttar Pradesh

& the Chairman of the Governing Council, RCUES Lucknow

Chief Editor:

Dr. Nishith Rai,

Director

Publication Officer:

Ms. Rachna Rishi

WORKSHOP ON URBAN MOBILITY SYSTEMS

BACKGROUND

Uttar Pradesh (UP) had an urban population of 4.45 Crores as per the Census of 2011, which is 22% of the total population of the state. Amongst the Indian states, UP has the second highest urban population, in absolute terms. However, the majority of Uttar Pradesh is still rural and agrarian in nature, with growing economic opportunities and educational ecosystem development in cities, a higher urbanisation rate is bound to trend in the coming years. The Government of Uttar Pradesh also has recently committed to become a 1 trillion dollar economy in next five years, and the growth of cities in this massive transformation, will be even more evident so as to become the engines of growth. However in the absence of a planned approach in the current systems, the cities are sprawling, and also face various urban mobility issues. For instance, the major million plus cities of UP have buses only in the range of 10-15 buses per 1 lakh population. As per the Ministry of Housing and Urban Affairs (MoHUA), Government of India, benchmarks, cities above a

million plus population must have a bus fleet ranging between 40-60 per 1 lakh population. As per the master plans, the largest cities of the state such as Lucknow and Kanpur do not have footpaths on more than half of the city roads. A deficiency in the infrastructure for these sustainable modes of transport has created more reliance on private vehicles for meeting the daily mobility needs. This has resulted in various negative impacts. Cities of UP are amongst the most polluted in the country. The state also tops the list of road traffic fatalities in India. Moreover, there are regular issues of congestion, noise pollution etc. associated with urban mobility in Uttar Pradesh. Thus, managing travel demand in a systematic manner is a key concern to address all these issues.

The Government of UP has started making efforts in this regard as well. Recently the state has introduced electric buses in all the million plus cities. Metro networks are also in running in some of these cities, while planning is underway in others. The cities have also invested in technology based solutions to manage traffic conditions. These efforts are commendable and





the state must continue to upgrade the infrastructure. RCUES Lucknow as part of its efforts in the field of sustainable mobility, has been working in key focus areas such as improving public transport, enhancing non-motorised transport infrastructure, fleet electrification of commercial vehicles, low emission zone planning etc. The current efforts are focused in Lucknow, Kanpur and adjoining regions in Uttar Pradesh.

These sessions will include officials from departments/authorities looking at street infrastructure, urban planning, transport planning, public transport, policy making etc. In order to understand the priorities and key focus areas of these different departments/authorities in the urban mobility space, our team is organising a full day Training Needs Assessment (TNA) session in collaboration with Regional Centre for Urban & Environmental Studies (RCUES), Lucknow. This is a closed door roundtable brainstorming session with the aim of identifying key focus areas of capacity building in the urban mobility sector in Uttar Pradesh. The inputs and suggestions from the TNA will be further used to develop a full

fledged capacity building programme to meet the necessary training requirements in future.

PARTICIPANTS

The workshop was organized for ARM, Computer Operator, Consultant, Deputy Director, Executive Engineer, Executive Officer, Managing Director, MIS Incharge, Sr. Programme Lead, Programme Lead, Research Analyst, Senior Assistant, SWM Specialist & Tax Collector. Overall 33 participants attended the workshop.

COORDINATION

The programme was coordinated by Mr Himanshu Chandra, Assistant Director, RCUES, Lucknow

WORKSHOP ON CITY BUS TRANSPORT SYSTEMS

BACKGROUND

Indian cities are facing several urban mobility challenges, and the deficiency of bus transport is one of the prominent ones amongst them. Historically our cities were largely dependent on bus-based transport for daily commutes, but in recent decades there has been a decline in the share of people using buses as a regular transport means. This is primarily due to reasons such as increasing income levels and associated private vehicle usage, depleting/stagnant fleet of buses in our cities, poor operational performances of buses etc.

Cities of Uttar Pradesh are also facing similar issues, in fact, the share of bus transport usage in major cities of UP is very low compared to some other similar or large cities of India. Only 4% of people use city bus transport in Lucknow while the share stands at 16% for the city of Pune. Furthermore, the major million-plus cities of UP have buses only in the range of 10-15 buses per 1 lakh population. As per the Ministry of

Housing and Urban Affairs (MoHUA) benchmarks, cities above a million plus population must have a bus fleet ranging between 40-60 per 1 lakh population. RCUES Lucknow, as part of its efforts in the field of sustainable mobility, has been working in key focus areas such as improving public transport, enhancing non-motorised transport infrastructure, fleet electrification of commercial vehicles, low emission zone planning etc. The current efforts are focused in Lucknow, Kanpur and adjoining regions in Uttar Pradesh. These sessions will include officials from departments/authorities looking at public transport planning, operations, policy making etc. In order to understand the priorities and key focus areas of these different departments/authorities, our team is organising a full day Needs Assessment in collaboration with Regional Centre for Urban & Environmental Studies (RCUES), Lucknow. The aim of the assessment is to identify key focus areas of capacity building and further develop a programme to meet the necessary training requirements in future.



PARTICIPANTS

The workshop was organized for Architect, Planner, Asst. Planner, Chief Engineer, DCP Traffic, Executive Engineer, General Manager, Junior Engineer, Member, Senior Architect, Team Lead & UIS. Overall 21 participants attended the workshop.

COORDINATION

The programme was coordinated by Mr Himanshu Chandra, Assistant Director, RCUES, Lucknow



WORKSHOP ON DISASTER MANAGEMENT AND CLIMATE CHANGE

BACKGROUND

With about 16% of the nation's population, Uttar Pradesh is the state with the highest population. It occupies 9% of the nation's territory and is the fourth-largest state in terms of geographic size. In the state, urbanisation has been happening gradually. Growing urbanisation, habitat expansion into unsuitable vulnerable areas, higher population and housing densities, vulnerable housing and building construction, non-engineered unsafe construction, and ageing buildings and other infrastructure and built up environment are a few factors that have increased the vulnerability of hazards and disasters in urban areas. In order to reduce the losses of life, property, or assets due to disasters, disaster risk management therefore entails taking steps to reduce the risk or vulnerability of natural disasters. Thirteen of India's 125 hazard-prone districts are in Uttar Pradesh. Floods, droughts, fires, and earthquakes are a few of the significant natural disasters that can occur in Uttar Pradesh. The state is vulnerable in terms of stampede, chemical, radiological, and other man-made disasters. The state's eastern region is notoriously prone to flooding, but in recent years, massive flooding has also affected western Uttar Pradesh. Another severe hazard affecting Uttar Pradesh is drought. Urban flooding on the rise is a global problem that presents a significant challenge to city management and urban planners everywhere. Urban floods can cause a variety of issues, from little inconveniences to large catastrophes that submerge cities for a few hours to several days. As a result, the effects could be significant and wide-ranging, causing temporary relocations of people harm to public amenities, worsening of water quality, and

the possibility of epidemics. Urban flooding is a significant problem that is made worse by on-going climate change, which has a negative impact on rainfall variability and disparities within and across cities and regions. The natural streams and watercourses have been harmed by unplanned development and the spread of expansive habitations alongside rivers and watercourses. Due to the urbanisation of the watersheds, runoff has grown proportionally, resulting in urban flooding. Against this backdrop, RCUES, Lucknow organized one day **Workshop on Disaster Management and Climate Change** to deliberate upon the pertinent issues and dimensions of prevention and mitigation of urban disasters and its effective management.

OBJECTIVES

- To discuss the national and state perspective of disasters and its management;
- To highlight the policy perspective and theoretical framework of prevention and mitigation of disasters;
- To examine the role of urban local governments in managing disasters in urban centres;
- To highlight the initiatives and best practices in prevention, response and mitigating disasters in urban areas;
- To highlight the importance of urban resilience in the context of climate change, disasters, and environmental sustainability;

PARTICIPANTS

The workshop was organized for Executive Officer, Office Superintendent, Environmental Engineers, Junior Engineers, Urban Planners,, and other concerned municipal officials of Nagar Palika

Parishads of Uttar Pradesh. Overall 31 participants attended the workshop.

COORDINATION

The programme was coordinated by Dr A K Singh, Assistant Director, RCUES, Lucknow.

TRAINING OF TRAINERS (TOT) FOR L3 KRCS ON ROLLING OUT JAL JEEVAN MISSION IN THE GRAM PANCHAYAT

Dr. Anjali Mishra, Joint Director, RCUES attended 5 Days Residential Training of Trainers (ToT) for L3 KRCs on Rolling out Jal Jeevan Mission in the Gram Panchayat organized by National Jal Jeevan Mission, Department of Drinking Water and Sanitation, Ministry of Jal Shakti, Government of India at Hotel Sarovar Premier, Jaipur (Rajasthan) from 17th October – 21st October 2022.



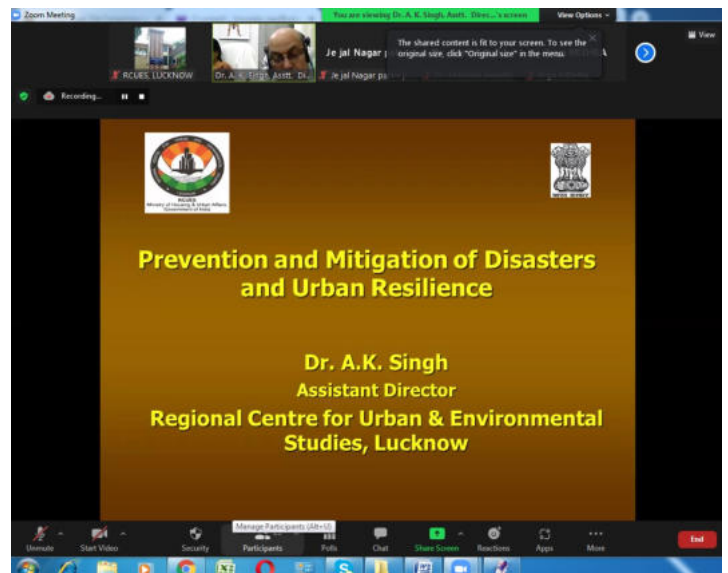
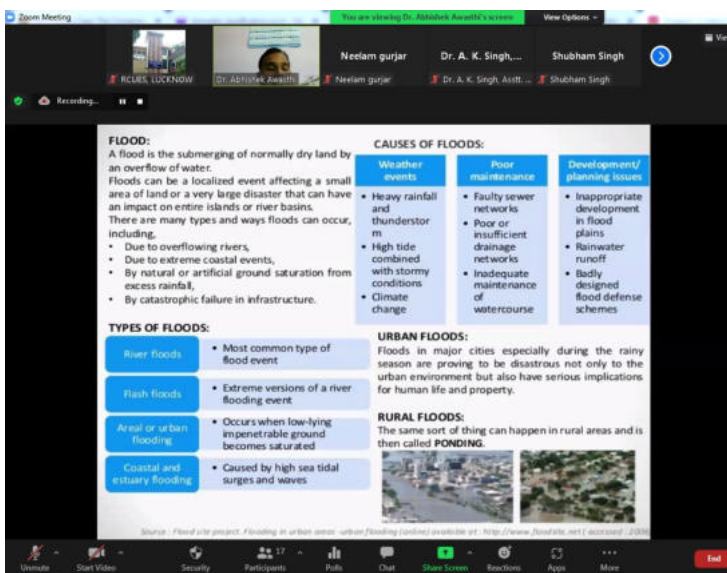
ONLINE WORKSHOP ON DISASTER MANAGEMENT

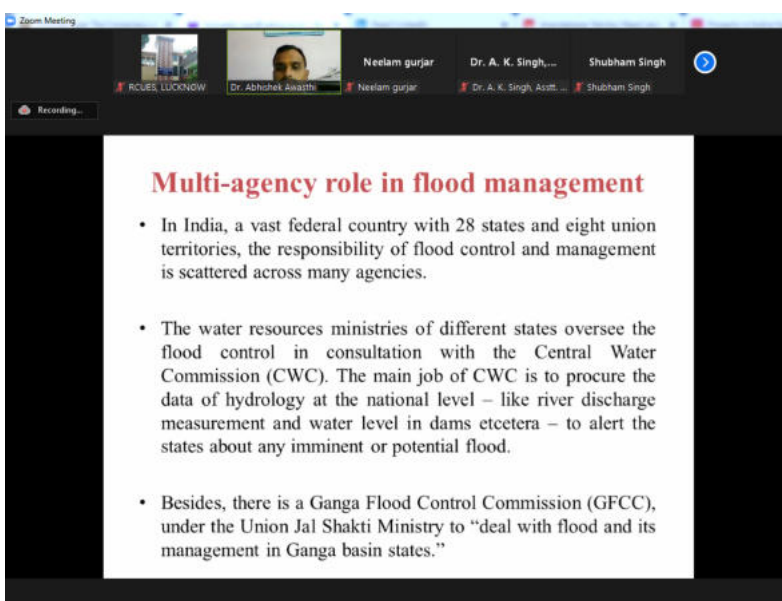
BACKGROUND:

With about 16 percent of the nation's population, Uttar Pradesh is the state with the highest population. It occupies 9 percent of the nation's territory and is the fourth-largest state in terms of geographic size. In the state, urbanisation has been happening gradually. Growing urbanisation, habitat expansion into unsuitable vulnerable areas, higher population and housing densities, vulnerable housing and building construction, non-engineered unsafe construction, and ageing buildings and other infrastructure and built up environment are a few factors that have increased the vulnerability of hazards and disasters in urban areas. In order to reduce the losses of life, property, or assets due to disasters, disaster risk management therefore entails taking steps to reduce the risk or vulnerability of natural disasters. Thirteen of India's 125 hazard-prone districts are in Uttar Pradesh. Floods, droughts, fires, and earthquakes are a few of the significant natural disasters that can occur in Uttar Pradesh. The state is vulnerable in terms of stampede, chemical, radiological, and other man-made disasters. The state's eastern region is notoriously prone to flooding, but in

| List of Online Workshops | |
|--------------------------|--------------------|
| Date | No of Participants |
| 19-Oct-22 | 28 |
| 21-Oct-22 | 58 |

recent years, massive flooding has also affected western Uttar Pradesh. Another severe hazard affecting Uttar Pradesh is drought. Urban flooding on the rise is a global problem that presents a significant challenge to city management and urban planners everywhere. Urban floods can cause a variety of issues, from little inconveniences to large catastrophes that submerge cities for a few hours to several days. As a result, the effects could be significant and wide-ranging, causing temporary relocations of people harm to public amenities, worsening of water quality, and the possibility of epidemics. Urban flooding is a significant problem that is made worse by ongoing climate change, which has a negative impact on rainfall variability and disparities within and across cities and regions. The natural streams and watercourses have been harmed by unplanned development and the spread of expansive habitations alongside rivers and watercourses. Due to the urbanisation of the watersheds, runoff has grown





proportionally, resulting in urban flooding. Against this backdrop, RCUES, Lucknow organized one day Workshop on “**Disaster Management and Climate Change**” to deliberate upon the pertinent issues and dimensions of prevention and mitigation of urban disasters and its effective management.

OBJECTIVES

- To discuss the national and state perspective of disasters and its management;
- To highlight the policy perspective and theoretical framework of prevention and mitigation of disasters;
- To examine the role of urban local governments in managing disasters in urban centres;
- To highlight the initiatives and best practices in prevention, response and mitigating disasters in urban areas;
- To highlight the importance of urban resilience in the context of climate change, disasters, and environmental sustainability;

SESSIONS

In view of the programme objectives, the following sessions were delivered by Internal and External Faculty of RCUES, Lucknow

- Prevention and Mitigation of Disasters in Urban Centres
- Disasters Preparedness and Capacity Building
- Climate Change and its Impact in Urban Centres
- Management of Urban Flood
- Best Practices and Case Study

PARTICIPANTS

The workshop was organized for Executive Officer, SFI, Junior Engineer, DPM, Clerk, & Computer Operator. Overall 86 participants attended the workshop.

COORDINATION

The programme was coordinated by Dr A K Singh, Assistant Director, RCUES, Lucknow .

WORKSHOP ON CITY SOLID WASTE ACTION PLAN UNDER SBM 2.0

BACKGROUND

The vision of SBM 2.0 for scientific Municipal Solid Waste Management (MSWM) is that cities will ensure segregation of waste at source, process waste in segregated fractions, recover resources and recycle to the maximum extent and minimize landfilling to 20% or less (including reject material coming out of processing). Cities must be seen to be clean 360 degree, duly remediating the legacy dumpsites. Further, Cities with non-conforming air quality need to replace the common manual street sweeping with air quality friendly mechanical sweeping and process the C&D wastes as well.

As a first step in fulfilling the vision, Regional Centre for Urban and Environmental Studies (RCUES) in MoU with Construction & Design Services (C&DS), U.P. Jal Nigam provided handholding support to all the 756 ULBs of Uttar Pradesh in preparation of the CSWAP, duly identifying the existing MSWM system, existing waste generation, projected waste generation, segregation as wet and dry waste, the available processing capacity and the gap thereof. The CSWAP also captured the gaps in dumpsite remediation, mechanical sweeping and C & D waste processing facilities. The Estimated cost for proposed components as per GAP analysis and Financing Planning of fund required for addressing the Gaps were done based on the norms given the operational guidelines of SBM 2.0- Urban. Funds will be available for addressing the assessed gaps based on the funding mechanism for the SWM projects with GoI share, State share and ULB share on pre-defined norms. The CSWAP of different ULBs were prepared as per the templates of CSWAP given in the SBM 2.0-Urban.

| List of Online Workshops | | |
|--------------------------|--------------------|--|
| Date | No of Participants | ULBs Covered |
| 02-Nov-22 | 6 | Agra & Firozabad |
| 03-Nov-22 | 9 | Mainpuri & Mathura |
| 04-Nov-22 | 11 | Aligarh & Etah |
| 05-Nov-22 | 12 | Hathras & Kasganj |
| 07-Nov-22 | 11 | Basti, Sant Kabir Nagar & Siddharthnagar |
| 09-Nov-22 | 14 | Banda, Chitrakoot, Hamirpur & Mahoba |
| 11-Nov-22 | 16 | Bijnor & Amroha |
| 14-Nov-22 | 23 | Moradabad, Rampur & Sambhal |
| 15-Nov-22 | 19 | Bhadhoi, Mirzapur & Sonabhadra |
| 16-Nov-22 | 19 | Bahraich, Balrampur, Gonda & Shrawasti |
| 17-Nov-22 | 16 | Fatehpur & Kausambi |
| 18-Nov-22 | 15 | Prayagraj & Pratapgarh |
| 19-Nov-22 | 18 | Deoria & Gorakhpur |
| 21-Nov-22 | 19 | Kushingar & Maharajganj |
| 22-Nov-22 | 17 | Baghpat & Bulandshahar |
| 22-Nov-22 | 34 | Gautam Buddha Nagar, Ghaziabad & Hapur |
| 29-Nov-22 | 24 | Jhansi, Jalaun & Lalitpur |
| 30-Nov-22 | 19 | Chandauli, Ghazipur, Jaunpur & Varanasi |
| 01-Dec-22 | 24 | Azamgarh, Ballia & Mau |
| 02-Dec-22 | 15 | Muzaffarnagar, Saharanpur & Shamli |
| 15-Dec-22 | 20 | Raebareilly, Kanpur & Barabanki |
| 16-Dec-22 | 22 | Mainpuri, Unnao & Farrukhabad |
| 17-Dec-22 | 25 | Etawah, Auriaya & Kannauj |
| 19-Dec-22 | 15 | Badaun & Pilibhit |
| 20-Dec-22 | 19 | Kushinagar, Shrawasti, Siddharthnagar & Maharajganj |
| 21-Dec-22 | 14 | Amethi, Ambedkar Nagar & Ballia |
| 22-Dec-22 | 22 | Banda, Prayagraj, Chitrakoot, Jaunpur, Varanasi & Pratapgarh |

The targeted outcomes of scientific MSWM were also be brought out in the CSWAP such as:

- timelines for implementation of required infrastructure,
- timelines for achieving stages of Star Rating under GFC protocol. A minimum 3 Star Rating will be achieved before the end of mission.

Functional Areas: - Overall Municipal Solid Waste Management focussing on the processing of the following categories which can be implemented simultaneously as independent projects: -

(i) MSW Processing Plant – Composting Plant/Bio-Methanation Plant for Wet and MRF cum RDF

Plant for Dry Waste

(ii) Legacy Dumpsites Remediation Plant

(iii) C&D Waste Processing Plant for cities with non-conforming air quality as per National Clean Air

Program (NCAP)

(iv) Mechanical Sweepers for Road Sweeping for cities with non-conforming air quality as per NCAP

(v) Sanitary Land Fills (SLFs)

(vi) Transfer Station for Secondary Storage of Waste.

PARTICIPANTS

Overall 478 participants attended the workshop.

COORDINATION

The programme was coordinated by Dr. Rajeev Narayan, Deputy Director & Mr. Ajit Kumar Mishra, Assistant Director, RCUES, Lucknow

ONLINE WORKSHOP ON MICRO CREDIT FACILITY TO URBAN POOR (THROUGH SVANIDHI SCHEME)

BACKGROUND

The outbreak of global pandemic COVID- 19 has led to massive devastation in India. In view of the global crises, Government of India declared a complete lock down in the country which has left a deep impact on the Street Vendors, labourers, migrant workers and all those marginalized communities who struggle hard for their survival. Government of India has declared a huge package of Rs. 20,00,000 crores for reviving Indian economy and providing relief to affected persons. The package of Self Reliance include governance reforms, credit support to urban street vendors, MSMEs, start up business, SHGs, relief to migrant workers, poor, and homeless etc. The role of urban local governments has massively increased in post lockdown situation in prevention, spread of pandemic disease, response, and protection of frontline workers and rehabilitation of urban poor. Street vendors play a significant role in ensuring availability of the goods and services at affordable rate at the door-step of the city dwellers. The COVID-19 pandemic and consequent lockdowns have adversely impacted the livelihoods of street vendors. They usually work with a small capital and their earnings are grossly inadequate to survive their families for long period and thus the savings along with capital are consumed. Therefore, there is an urgent need to provide credit for working capital to street vendors to resume their business. Prime Minister SVANidhi Scheme has been launched by government of India to support the urban street

| List of Online Workshops | |
|--------------------------|--------------------|
| Date | No of Participants |
| 11-Nov-22 | 109 |
| 15-Nov-22 | 50 |

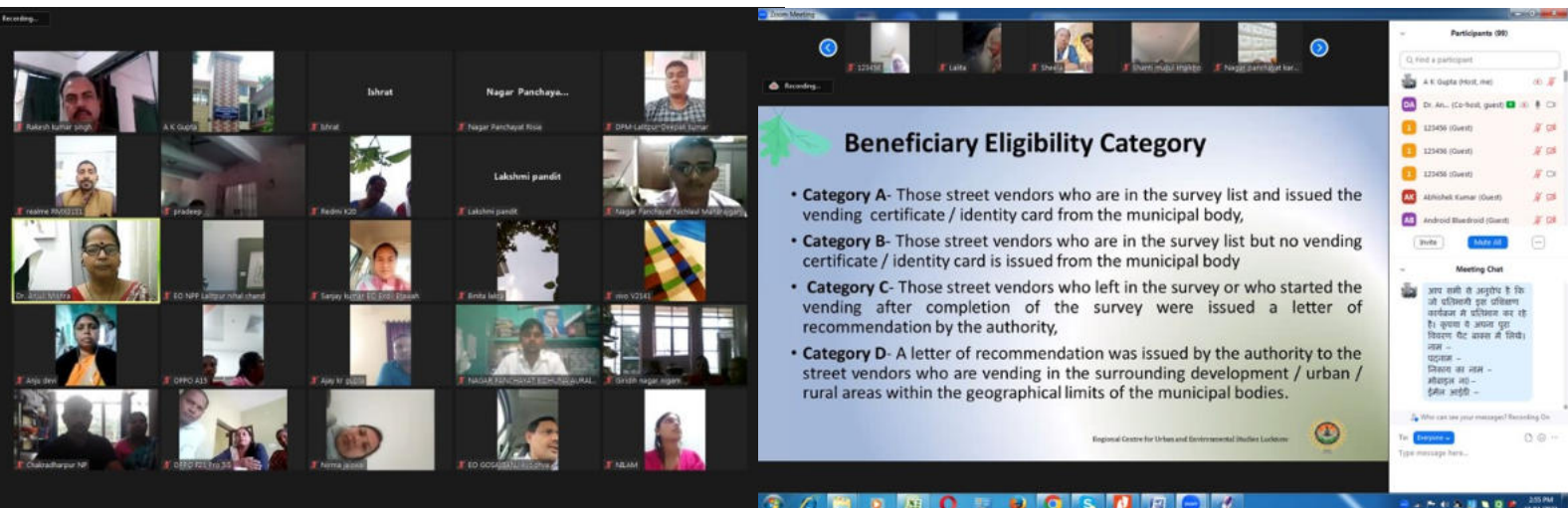
vendors in reviving their business and livelihood. Against this backdrop, present programme purports to discuss and deliberate upon the provisions and procedures of the scheme so that it may be effectively implemented in urban centres.

OBJECTIVES

- To highlight the imperatives of Aatma Nirbhar Bharat and emerging opportunities for urban poverty alleviation;
- To discuss and deliberate upon the various provisions and procedures of the Prime Minister SVANidhi Scheme;
- To highlight the Micro credit facility to urban poor through SVANidhi Scheme;
- To discuss the provisions of the SVANidhi se Samridhi Scheme;
- To highlight the problems and challenges in implementation of Prime Minister SVANidhi Scheme and suggesting measures for its effective implementation.

PARTICIPANTS

The workshop was organized for Assistant Municipal Commissioner, Executive Officer, City Mission Manager, Accountant, District Programme Manager,



Community Organiser, Office Assistant, City Mission Manager, Community Resource Person. Overall 159 participants attended the workshop.

COORDINATION

The programme was coordinated by Dr Anjali Mishra, Joint Director, RCUES, Lucknow

ONLINE WORKSHOP ON CONTRACT MANAGEMENT

BACKGROUND

Urban India has grown by nearly five times during the last fifty years, while the population of India has grown two and half times in the same period. India's Urban Population grew from reported 290 million in Census 2001 to an estimated 340 million in 2008. This process of urbanization has created a huge gap between demand and supply of urban services and infrastructure.

Contract Management is important throughout the entire process of the contract cycle and not just at award process, effective contract management will bear dividends for both employer and contractor to ensure a well-managed agreement in practical and logistical terms. Contracts, the foundation to every business relationship, are a legally binding agreement between the parties identified in the agreement to fulfil all the terms and conditions outlined in the agreement. A prerequisite requirement for the enforcement of a contract, amongst other things, is the condition that all the parties to the contract accept the terms of the claimed contract. One who is in charge of the project is known as the Employer. One who agrees to execute or perform is known as the Contractor.

Against this view point, Regional Centre for Urban and Environmental Studies (RCUES), Lucknow, under the auspices of Ministry of Housing and Urban Affairs, Government of India, New Delhi organized two, One day Online workshop on contract

| List of Online Workshops | |
|--------------------------|--------------------|
| Date | No of Participants |
| 16-Nov-22 | 53 |
| 18-Nov-22 | 56 |

management for the Municipal Officials, Urban Planner and Urban Infrastructure Expert of Urban Local Bodies.

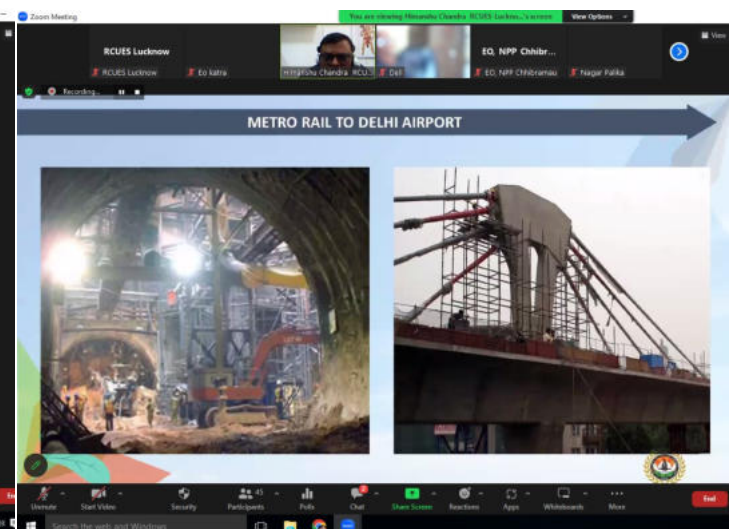
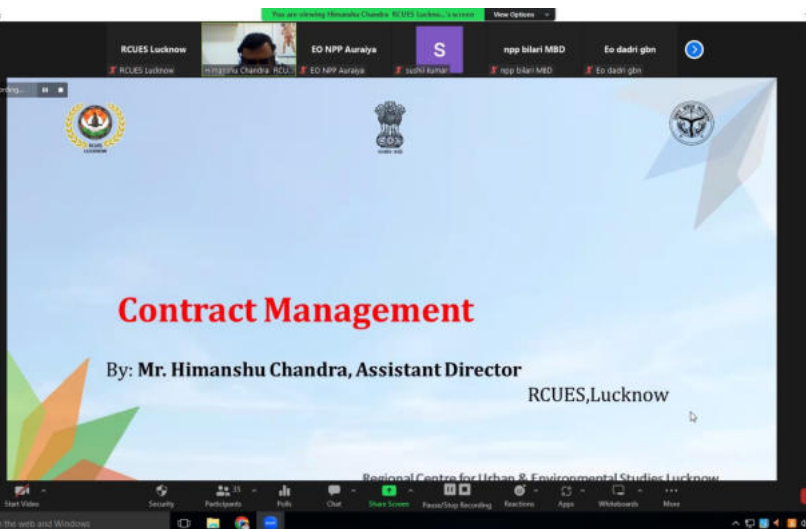
OBJECTIVES

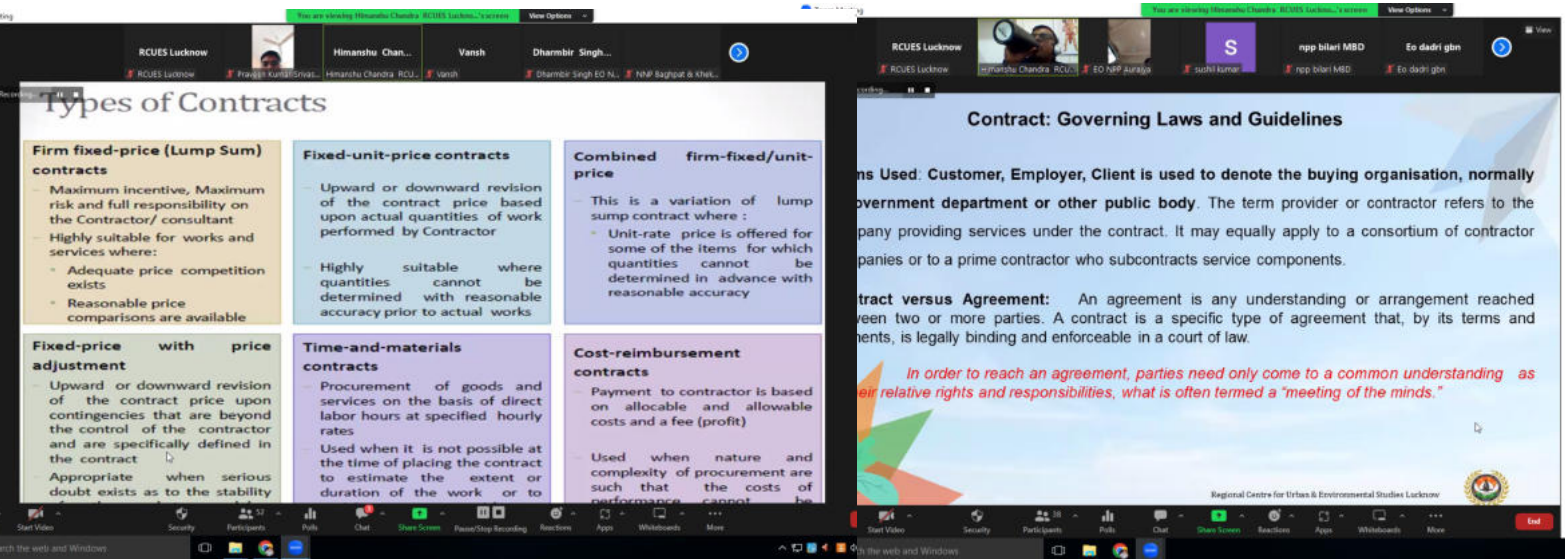
- To discuss and deliberate on emerging issues and challenges in planning for infrastructure development projects and their implementation.
- To discuss the criterion and parameters for project formulation in the field of water supply, Sewerage, SWM and urban transportation
- To discuss the desirable contents in DPRs and essential characteristics of Project development cycle.
- To discuss the procedures and legal issues in contract management.

PARTICIPANTS

The workshop was organized for Executive Office, Sanitary & Food Inspector, Environmental Officer, Sub Engineer, Urban Planner, Urban Infrastructure Specialist, Dy. Quality Manager, Executive Engineer. Overall 109 participants attended the workshop.

COORDINATION





The programme was coordinated by Mr Himanshu Chandra, Assistant Director, RCUES, Lucknow

WORKSHOP ON WATER RESOURCE MANAGEMENT

BACKGROUND

India's fragile water resources are under stress and running out. One of the most valuable natural resources, groundwater has been crucial to maintaining India's economy, environment, and way of living. India is a relatively large country with a diverse geological, climatologically, and geographical setting, resulting in varying groundwater conditions across the nation. Most Indian towns are ill-prepared to handle the growing water scarcity and water stress due to rapid urbanisation, population increase, lack of new raw water sources, outdated water infrastructure, and ineffective water administration. Impacts of climate change could lead to periodic drying up of captive water sources; this will only make the issue worse. Groundwater supplies provide 48 percent of India's urban water supply, according to a report by the Centre for Science and Environment, and in seven of the country's ten most populated cities, groundwater levels have drastically decreased over the previous two decades. Rapid urbanisation and population growth, coupled with no added raw water sources, archaic water infrastructure and inefficient water governance, means that most Indian cities are ill-equipped to handle the increasing water scarcity and water stress. Climate change impacts will only aggravate the situation; rising temperatures could cause the periodic drying up of captive water sources. By 2050, at least 30 Indian cities will face a grave water risk, according to the WWF. The problems range from poor management of water sources, contaminated supplies, leaky distribution networks and vast volumes of untreated wastewater being

| List of Online Workshops | |
|--------------------------|--------------------|
| Date | No of Participants |
| 18-Nov-22 | 33 |
| 19-Nov-22 | 35 |

poured into India's rivers. More alarmingly, the long-term, indiscriminate extraction of groundwater is making water tables fall rapidly in most Indian cities. Groundwater is the main source of domestic water supply for rural and urban India as more than 80 percent of it is supply sourced through it, making the country the largest user of groundwater in the world. This excessive extraction of groundwater has made almost 22 percent of assessed blocks as critical or overexploited. At the state level, Punjab, Haryana, Rajasthan, and Delhi are states where Stage of Groundwater Extraction is more than 100 percent and hence the groundwater is overexploited. Against this backdrop, two one day each Workshops on "Water Resources Management:" were organized on November 18, and 19, 2022 at Lucknow by RCUES, Lucknow .

OBJECTIVES

The workshops were organised keeping in view of the following main objectives: main objectives:

- To review the status of urban water resources, water supply system, policy perspective and need for effective urban resources management;
- To highlight the issues of water scarcity, water risks and water stress and emerging need of rain water harvesting ;

MANAGEMENT OF URBAN FLOODING AND CLIMATE CHANGE

Dr. Abhishek Awasthi
Associate Professor
Department of Environment Science
Maharaja Agrasen University, Solan (H.P.)

Prevention and Mitigation of Disasters and Urban Resilience

Dr. A.K. Singh
Assistant Director
Regional Centre for Urban & Environmental Studies, Lucknow

To orient the participants regarding rain water harvesting mechanism, procedures and practices in urban centres;

To highlight the concept and practice of rejuvenating water bodies and their bio-remediation;

To discuss and elaborate the water treatment technologies and waste water management in urban centres;

To highlight the recycling, treatment and reuse of waste water in urban centres;

To discuss the issue of conservation of water resources in urban centres and also to highlight the best practices and case studies.

PARTICIPANTS

The workshop was planned for Executive Officer, Junior Engineers, DPM, Assistant Engineers, Urban Infrastructure Specialists, Sanitary and Food Inspectors, and other concerned municipal officials of ULBs and other parastatal organisations of Uttar Pradesh. Overall 68 participants attended both the workshops.

SESSIONS

In view of the programme objectives, the following sessions were delivered by Internal and External Faculty of RCUES, Lucknow

- Urban Water Resources
- Rain Water Harvesting
- Rejuvenation of Water Bodies and Bio-Remediation
- Water Treatment Technologies
- Recycling and Reuse of Waste Water
- Conservation of Water Resources

COORDINATION

The programme was coordinated by Dr A K Singh, Assistant Director, RCUES, Lucknow

WORKSHOP ON UTTAR PRADESH STATE SEPTAGE POLICY & USED WATER MANAGEMENT

BACKGROUND:

As a step towards achieving improved sanitation in urban areas of the state, the Urban Development Department of the GoUP has formulated “Uttar Pradesh State Septage Management Policy” (UPSSMP) which was approved by the Cabinet on 23 October 2019 in line with the National Policy on Faecal Sludge and Septage Management, 2017. This is a landmark resolve of the Government to improve the urban sanitation so as to achieve outcome levels impact on public health, environment quality and human dignity. The policy addresses much required guidance and directions to achieve the targets as laid out in the ODF++ and lends sustainability to the ODF status achieved under Swachh Bharat Mission (SBM) – Urban 2.0. On October 1, 2021 the Ministry of Housing and Urban Affairs (MoHUA), Government of India launched Swachh Bharat Mission-Urban 2.0. The aim of this mission is to make ODF sustainable (ODF++) and ensure 100% used water (wastewater) is treated for reuse. The SBM 2.0 emphasizes on Used Water Management with special focus of Faecal Sludge & Septage Management as a new component.

Nonetheless, stakeholders from ULBs may need help in deciphering the technical aspects of these Policy and operational guidelines. The referred Septage Policy and the Used Water Management component under SBM 2.0 have laid out clearly the implementation plan with time bound achievement of the targets. The workshops on Septage Management Policy and Used Water Management are a first step towards capacity building of all ULBs of Uttar Pradesh and implementation of this policy and SBM 2.0 guidelines. These workshops will inform all Municipal Bodies about the newly introduced policy and encourage them to prepare City Sanitation Plan for each of the ULBs and actively implement policy and SBM 2.0 initiatives in a timely and innovative manner.

Against this backdrop, RCUES, Lucknow organized 22, one day workshop on “Uttar Pradesh Septage Policy and Used Waste Management sponsored by

| List of Workshops | | |
|-------------------|--------------------|---------------------|
| Date | No of Participants | Venue |
| 25-Nov-22 | 30 | Meerut |
| 26-Nov-22 | 28 | Meerut |
| 28-Nov-22 | 28 | Meerut |
| 29-Nov-22 | 26 | Gautam Buddha Nagar |
| 30-Nov-22 | 27 | Hapur |
| 06-Dec-22 | 39 | Firozabad |
| 12-Dec-22 | 31 | Mainpuri |
| 13-Dec-22 | 23 | Mainpuri |
| 14-Dec-22 | 30 | Etah |
| 15-Dec-22 | 24 | Etah |
| 16-Dec-22 | 26 | Kasganj |
| 17-Dec-22 | 25 | Kasganj |
| 19-Dec-22 | 33 | Saharanpur |
| 20-Dec-22 | 23 | Saharanpur |
| 21-Dec-22 | 25 | Muzaffarnagar |
| 22-Dec-22 | 26 | Muzaffarnagar |
| 23-Dec-22 | 19 | Shamli |
| 24-Dec-22 | 36 | Shamli |
| 26-Dec-22 | 32 | Moradabad |
| 27-Dec-22 | 19 | Moradabad |
| 28-Dec-22 | 30 | Rampur |
| 29-Dec-22 | 44 | Hathras |

Department of Urban, Government of Uttar Pradesh

OBJECTIVES:

- To acquaint the participants with the need, importance, and objectives of Used Water Management with special focus of Faecal Sludge & Septage Management as new component of SBM 2.0.
- To acquaint the participants with the need, importance, and objectives of Uttar Pradesh State Septage Management Policy-2019.
- To aware the participants with City Sanitation Action Plan.
- To aware the participants with different types of Used Water Management System - On-site & Off-Site.
- To aware the participants with the Used Water Management Process – Containment/ Collection, Conveyance/Transportation, Treatment, and Disposal/Reuse.

- To highlight different technologies for Used Water Treatment with a comparative study of different technologies.
- To aware the participants with Faecal Sludge & Septage Management with special focus on Co-Treatment and additional methods.
- To aware the participants with Participatory Planning & IEC for effective Faecal Sludge & Septage Management.

PARTICIPANTS

The workshop was organized for Sanitary & Food Inspector/ Chief SFI, Engineer, Officials related to SBM, District Programme Manager and District Coordinator under SBM Cell. Overall 624 participants attended the workshops.

COORDINATION

The programme was coordinated by Dr Rajeev Narayan, Deputy Director and Dr Nasruddin, Assistant Director, RCUES, Lucknow.

TRAINING PROGRAMME ON WATER AUDIT, WATER ACCOUNTING AND ENERGY AUDIT OF RURAL WATER SUPPLY SCHEMES UNDER JAL JEEVAN MISSION

BACKGROUND

The availability of potable water (underground and surface) is very limited, There are considerable losses in the water produced and distributed through leakages in pipelines, valves, public tapes un authorized service connection etc. the percentage of unaccounted for water (UFW/NRW) ranges from 30 to 55 % .Thus, huge quantum of water is being wasted which also leads to reduction in water as well as revenue losses. Therefore it become essential to plan the conservative use of water i.e. water auditing/ leakage control through metering, improved O & M practices and awareness intervention.

Water Audit of a water supply scheme can be defined as the assessment of the capacity of total water produced by the Water Supply Agency/VWSC and the actual quantity of water distributed throughout the area of service by the Agency/VWSC, thus leading to an estimation of the losses otherwise known as non-revenue/ un-accounted-for water (NRW/UFW) and it is the expression used for the difference between the quantity of water produced and the quantity of water billed or accounted for.

RCUES Lucknow has been designated as the Key Resource Centre under Jal Jeevan Mission by the Ministry of Jal Shakti, Government of India. Under which Centre has conducted two training programmes on Training programme on Water Audit, Water Accounting and Energy Audit of Rural Water Supply Schemes under Jal Jeevan Mission-Level 2 for the functionaries under Jal Jeevan Mission.

Our Centre has been designated as a Key Resource Centre under Jal Jeevan Mission by the Ministry of Jal Shakti, Government of India. Under which Centre conducted capacity Building programmes for various levels of functionaries under Jal Jeevan Mission.

OBJECTIVES

| List of Workshops | | |
|-------------------|--------------------|-------------------------------------|
| Date | No of Participants | Nomination State |
| 25-26 Nov, 2022 | 35 | Uttar Pradesh & Punjab |
| 08-09 Dec, 2022 | 41 | Uttar Pradesh, Maharashtra, Haryana |

- Water audits and leak detection programmes can achieve substantial benefits, including the following:
- Reduced Water Losses Water audit and leak detection are the necessary first steps in a leak repair programme. Repairing the leak will save money for the utility, including reduced power costs to deliver water and reduced chemical costs to treat water.
- Financial Improvement A water audit and leak detection programme can increase revenues from customers who have been undercharged, lower the total cost of whole sale supplies and reduce treatment and pumping costs.
- Increased Knowledge of the Distribution System During a water audit, distribution personnel become familiar with the distribution system, including the location of main and valves. This familiarity helps the utility to respond to emergencies such as main breaks.
- More Efficient Use of Existing Supplies Reducing water losses helps in stretching existing supplies to meet increased needs. This could help defer the construction of new water facilities, such as new source, reservoir or treatment plants.
- Safeguarding Public Health and Property Improved maintenance of a water distribution system helps to reduce the likelihood of property



damage and safeguards public health and safety.

- Improved Public Relation The public appreciates maintenance of the water supply system. Field teams doing the water audit and leak detection or repair and maintenance work provide visual assurance that the system is being maintained.
- Reduced Legal Liability By protecting public property and health and providing detailed information about the distribution system, water audit and leaks detection help to protect the utility from expensive law sue.

PARTICIPANTS

The workshop was organized for Superintending Engineers, Executive Managers Engineers, Junior Engineers, Water Utility and Waster Testing laboratory personnel from Public Health Department (PHEDs)/Rural Water Engineering Supply (RWS) Departments (PWDs) or departments/Public works and other concerned persons from under JJM projects. Overall 76 participants attended the workshop.

COORDINATION

The programme was coordinated by Dr Alka Singh, Deputy Director and Mr Himanshu Chandra, Assistant Director, RCUES, Lucknow



TRAINING CUM EXPOSURE VISIT ON USED WATER AND FECAL SLUDGE MANAGEMENT AT CHUNAR, MIRZAPUR

BACKGROUND

The Swachh Bharat Mission (Urban) will continue till 2025-26 with focus on sustainability of Open D outcomes, achieving scientific processing of solid waste in all cities, and managing waste water in cities with less than one lakh population as per Census 2011, the cities that were not covered under Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

All statutory towns to become at least ODF+; all cities with below 1 lakh population to be made ODF++; and putting in place systems and processes so that all wastewater is safely treated and optimally reused and no untreated wastewater pollutes water bodies.

The mission will focus on ensuring complete access to sanitation facilities to serve additional population migrating from rural to urban areas in search of employment and better life.

Complete liquid waste management in cities in less than one lakh population – a new component introduced under SBM-Urban 2.0 will ensure that systems and processes are set up in every city so that all wastewater is safely contained, collected, transported and treated and no wastewater pollutes our water bodies. Regional Centre for Urban and Environmental Studies (RCUES), Lucknow and Water, Sanitation and Hygiene Institute (WASH – (I) are continuously working towards the capacity building and trainings of the concerned persons and

| List of Training cum Exposure | |
|-------------------------------|--------------------|
| Date | No of Participants |
| 02-03 December, 2022 | 22 |
| 05-06 December, 2022 | 30 |

supporting the Government to achieve the objective. RCUES and WASH - (I) have conducted numerous training programmes and exposure visits for engineers from Uttar Pradesh Jal Nigam (UPJN) as well as Executive Officers from various Urban Local Bodies.

The present Exposure visit was organized for the Executive Officers (EOs) of various ULBs who are working towards implementation of used water treatment and faecal sludge management to ensure that they will implement the best practices in their region.

OBJECTIVES

The purpose of exposure visits is to learn from the experience of others outside your own community, by direct interaction. Both RCUES and WASH Institute has been organizing the training and capacity building programmes for solid and liquid waste management for quite a long time. SBM-U 2.0 envisions to make all cities 'Garbage Free' and ensure grey and black water management in all cities with a population of



less than 1 lakh as ODF++, thereby achieving the vision of safe sanitation in urban areas. The overall objective of this exposure visit is to exchange ideas and experience regarding challenges in implementation of Sewage Treatment and infrastructure development related to STPs such as Interception and Diversion, Faecal Sludge Management services at town/city-scale, and potential of decentralized management facilities for human waste for small ULBs like Chunar. The visit also involves the interaction with various stakeholders apart from the members of the organising team for exchange of ideas and sharing of experiences.

Exposure Visit

There was brief introduction about the objective of organizing this Exposure visit by Ajit Kumar Mishra, RCUES, Mr. Nitin Kumar, WASH – (I) and Mrs. Rachna Rishi, RCUES Lucknow. The visit started with taking the participants to Pumping station at Dinapur STP plant which is located at Chauka Ghat, Varanasi. The participants were shown the diversion of the drain to the sump well and then lifting of waste water through pump and sending to the sewer line towards Dinapur STP plant. The dry weather flow was approx 116 MLD however the capacity of the pumping station is 140 MLD. The pumping station has 33 KV High Tension transformers for pumping and equipped with real time flow monitoring device. The participants were then taken to the Dinapur STP plant which is of 140 MLD. The project is funded by JICA

and the first and the largest sewage treatment project to be implemented under Namami Gange Mission. It is equipped with the latest technology. The treatment plant employs activated sludge process and is powered by green power from sewage (biogas), significantly reducing the carbon footprint apart from lowering operational cost, This is in line with PM's vision to power India through green energy and India's ratification at the UN Climate Change Convention. The plant produces of 2500-3000 m³/day balloon type double membrane gas holders, the largest of its kind in India. The BOD level of water received at the inlet is approx 130 mg/L and treated water is approx 15mg/L. The STP discharged its treated water into the river Varuna. The participants were excited to see the Dinapur STP plant and its working. Participants were taken to the Assi ghat Pumping station and shown Interception and Diversion Structures.

After visiting Assi ghat I&D and Pumping Station the participants moved to Ramnagar STP 10 MLD. The STP is based on AAO technology (Anaerobic, Anoxic and Oxidation). The plant is suitable for ULBs whose population is below 1 Lakhs. The last field visit included the Fecal STP plant in Chunar, Mirzapur. The plant is based on simple dewatering technology and then biological digestion of sludge to manure by plants. The participants were shown the working of FSTP plant.





PARTICIPANTS

The workshop was organized for Executive Officers, Junior Engineers, Assistant Engineers of UP Jal Nigam. Overall 52 participants attended the workshop.

COORDINATION

The programme was coordinated by Mr Ajit, Kumar Mishra, Assistant Director, RCUES, Lucknow

E-CONSULTATION WORKSHOP WITH GOVERNMENT OFFICIALS ON OPERATIONAL COURSE DELIVERY AND DISCUSSION ON THE CITY-LEVEL ASPECTS IMPACTING HEALTH AND OVERALL DEVELOPMENT OF ITCN

BACKGROUND

NIUA, with support from Bernard van Leer Foundation, is implementing the 'Infant, Toddler and Caregiver-Friendly Neighbourhoods (ITCN) Capacity Building Programme' focused on city officials and young professionals. The Programme, anchored by the Inclusive Cities Centre (ICC) at NIUA, aims at addressing the development needs of the cities' youngest citizens, below the age of six years, and their caregivers through planning and development interventions at neighbourhood level on a city-wide scale. Under the Programme, CEPT-Research and Development Foundation (CRDF) is supporting the ITCN team in developing training modules and also train the trainers' from 5 training delivery agencies - All India Institute of Local Self Government, Mumbai; Centre for Good Governance, Dr. R. S. Tolia Uttarakhand Academy of Administration, Nainital; Engineering Staff College of India, Hyderabad; Kerala Institute of Local Administration, Trissur; and Regional Centre for Urban and Environmental Studies, Lucknow.

Training on orientation level of course was organized by 5 training delivery agencies during April to June 2022 and 254 officials from 10 States/UT and 99 Cities were trained. The Programme is now scheduled to deliver the next level of course (operational level), to select city officials, focusing on operationalisation and institutionalisation of data and information systems in ULBs. The course also provides several tools for implementation of ITC-centric projects.

The early years of childhood are a key developmental period for individuals. Early experiences have lifelong

protective or detrimental effects on health, well-being, learning, behaviour, future employment and earnings. There are various aspects (like neighbourhoods, streets, park and open spaces, social infrastructure and urban services) at city level that impact health and overall development of Infant Toddler and their Caregivers. As per the ITCN Framework, the five objectives of the ITC Neighbourhood include Safe, Green, Accessible, Playful, and Inclusive. The programme intends to discuss these aspects with city officials to understand their perspective and build knowledge and capacity around the subject.

In this context, this workshop will involve in discussion the officials who are trained in orientation level of course and partner agencies.

OBJECTIVES

The workshop would focus on three major aspects:

- Orient the government officials on the operational course.
- Devise strategy for delivery of the operational course.
- Understand the views of city officials on the city-level aspects as per ITCN framework which impact the health and overall development of ITC and advocate on the subject.

PARTICIPANTS

Government officials trained by the training delivery agencies under the orientation level course, ToTs of concerning training agencies. In total 36 participants attended the workshop.

TRAINING CUM EXPOSURE VISIT CITY-WIDE INCLUSIVE SANITATION (CWIS)

NIUA in collaboration with Indian Institute for Human Settlements (IIHS) and All India Institute of Local Self Government (AIILSG) Mumbai and support of RCUES Lucknow organised a two-day programme and exposure visit from 8-9 December, 2022 in Tiruchirappalli, Tamil Nadu. The objective was to provide a comprehensive

understanding of CWIS through Tamil Nadu's experiences towards the inclusion of gender, urban poor, managing Self-Help Groups (SHGs) and supporting health, safety and livelihood of the sanitation workers to mid-level engineers from several organisations. These agencies included Urban Development Directorate, State Urban Development Agency, Peyjal Nigam, Jal Sansthan departments of Uttarakhand, Chhattisgarh and Uttar Pradesh and, Regional Centre for Urban and Environmental Studies Lucknow.



ORIENTATION TRAINING PROGRAMME FOR CONSULTING ENGINEERS UNDER PANCHAYATI RAJ DEPARTMENT, GOVT. OF UP

BACKGROUND

Development of infrastructure has been accelerating in the last few decades with the increased awareness towards improved living environment. With the introduction of Finance Commission (FC), a sum of Rs 26608.4 crore have been assured to be devolved to Gram Panchayats (GPs) during the period of 2020-26 which provides them an enormous opportunity for local self-development at the cutting-edge institutional level of Gram Panchayats (GPs) and hence a robust mechanism was required which focuses on integrated plan creation, monitoring of fund flow and improved transparency through use of technology.

The infrastructure which is being developed by various Gram Panchayat will need more number of qualified and trained manpower for better designing, speedy implementation of all the schemes in economical manner and also for proper operation and maintenance of old and new projects and infrastructure development.

Regarding this, State took a paradigm shift from traditional planning approach to introduce an integrated planning system viz. Gram Panchayat Development Plan (GPDP), as per Ministry of Panchayati Raj, Government of India, Guidelines, in all Gram Panchayats for creation of Annual Plans by GPs capturing local needs by visualizing the annual budget of every GP following a decentralized, participatory, bottom-up planning process. The annual Plan consists of works to be done across the year in the Gram Panchayats.

| List of Training | |
|------------------|--------------------|
| Date | No of Participants |
| 17-Dec-22 | 49 |
| 17-Dec-22 | 16 |
| 20-Dec-22 | 54 |
| 20-Dec-22 | 17 |
| 22-Dec-22 | 28 |
| 24-Dec-22 | 53 |
| 27-Dec-22 | 49 |
| 27-Dec-22 | 13 |
| 28-Dec-22 | 28 |
| 29-Dec-22 | 29 |

The annual Plan consists of works to be done across the year in the Gram Panchayats. Department of Panchayati Raj, Uttar Pradesh (DoPR) lacks the technical manpower for civil works in the Gram Panchayats. Hence, DoPR has decided to do district wise empanelment of the Private individual Consulting Engineer (Civil) on work basis payment mode.

The broad Scope of work of the Empaneled Consultants are as follows:

- To prepare estimates of works/Projects taken by the Gram Panchayats.
- Map/ Layout design of the work.
- Preparation of MB of the works.
- Other related civil works awarded by the Gram Panchayats.





In this backdrop, RCUES, Lucknow organized 10, One Day Training programme for Engineers for Gram Panchayat dealing with roads, streets, building, water supply, sewer, drains, street light, water bodies, etc.

OBJECTIVES

- Develop technical capabilities in preparing estimates of works/projects taken by the Gram Panchayats.
- Develop technical capabilities to measure the activities of work/projects executed by Gram Panchayats.
- Develop the understanding of tendering process of different types of activities in the Gram Panchayat.
- Develop the understanding of standard specification for different types of construction work in the Gram Panchayat.

- To orient the participants in preparation of MB of the works as per Gram Panchayat.
- To orient the engineers in understanding the different approaches and its applicability and long term sustainable models

PARTICIPANTS

The workshop was organized for Consulting Engineers under Panchayati Raj Department, Govt. of UP. Overall 336 participants attended the Training.

COORDINATION

The programme was coordinated by Dr Alka Singh, Deputy Director, Dr Nasruddin and Mr Himanshu Chandra, Assistant Director, RCUES, Lucknow

ORIENTATION TRAINING PROGRAMME FOR SOLID & LIQUID WASTE MANAGEMENT (SLWM) CONSULTANT UNDER PANCHAYATI RAJ, DEPARTMENT, GOVT. OF UP

BACKGROUND

The Sustainable Development Goals (SDGs) place significant emphasis on sanitation, cleanliness and hygiene. Decades ago, Mahatma Gandhi said that 'sanitation is more important than political freedom'. Development of water supply, sewerage and sanitation infrastructure has been accelerating in the last few decades with the increased awareness towards improved living environment. Water, sanitation, and hygiene (WASH) directly impact human health and have far reaching consequences when ignored. India is one of the fastest developing economies, but when it comes to WASH indicators, it continues to lag behind. The management of solid and liquid waste in India has surfaced or continued to be a severe problem not only because of environmental and aesthetic concerns but also because of the enormous quantities generated every day.

With a population of over 1.2 billion, there is a mounting and urgent need to address sanitation. Solid and Liquid Waste Management (SLWM) is one of the key components of Swachh Bharat Mission (SBM) (G), launched with the objective of bringing improvement in cleanliness, hygiene and the general quality of life in rural areas.

SBM focuses on generating awareness and providing community managed sanitation systems. To implement SLWM initiatives economically and efficiently, ownership at grass root level and community involvement at all stages is critical. Information, Education, and Communication (IEC) interventions should focus on SLWM to create a demand for a sustainable system. This must lead to setting up systems for waste disposal in such a way that it has tangible impact on the population. The community/Gram Panchayat (GP) has to be

| List of Training | |
|----------------------|--------------------|
| Date | No of Participants |
| 21-22 December, 2022 | 28 |
| 28-29 December, 2022 | 35 |

encouraged to come forward and demand such a system, which they can subsequently operate and maintain. Awareness and education campaigns should aim for panchayat officials, elected representatives, schools, nongovernmental organisations (NGOs) working in villages, shop keepers, families, and general public.

The GP functionaries would be responsible for design, implementation, operation and maintenance (O&M) of SLWM systems with support from respective state governments. Mechanisms for involving third parties in construction and management activities under GP and community supervision can be explored. In such cases, absolute clarity in the roles and responsibilities of various stakeholders in managing SLWM systems is a must. Community contribution and appropriate user charges for sustainable SLWM initiatives are also desirable.

In order to cater to the needs of Sanitation services in the state there is a need for Specialized Training courses for Solid and Liquid Waste Management Experts on various aspects of Public Health Engineering which are essential for the design, construction, operation and maintenance sanitation projects, so that schemes and projects that are implemented are able to meet the criteria of cost effectiveness and efficient operation, maintenance and repair in timely manner.

In this backdrop, RCUES, Lucknow organized following Two Days Training programme for Solid and Liquid Waste Management Expert dealing with



septage, sanitation, drainage and solid waste management.

OBJECTIVES

- To acquaint the participants with the need, importance, and objectives of SBM-G and Uttar Pradesh Solid Waste Management Policy for rural areas.
- To acquaint the participants with the need, importance, and objectives of Solid and Liquid Waste Management.
- To acquaint the participants with the need, importance, and objectives of Faecal Sludge Management.
- To aware the participants with different types of Treatment and Reuse of Used Water
- To aware the participants with the concept of Participatory Planning and IEC.
- To orient the participants on Innovative and Cost Effective Technologies and best practices.

PARTICIPANTS

The workshop was organized for Solid and Liquid Waste Management Consultants under Panchayati Raj Department, Govt. of UP. Overall 63 participants attended the Training.

COORDINATION

The programme was coordinated by Dr Alka Singh, Deputy Director, Dr Nasruddin and Mr Himanshu Chandra, Assistant Director, RCUES, Lucknow



TRAINING PROGRAMME FOR PLANNING & IMPLEMENTATION OF JAL JEEVAN MISSION

BACKGROUND

The Jal Jeevan Mission is a flagship scheme of the government which seeks to not only provides functional household tap connections for all, but seeks to promote the holistic management of local water resources. The JJM aims to provide a Functional Household Tap Connection (FHTC) to every rural household in the country. It promotes the management of water at the lowest appropriate level through decentralized, but integrated water resource management by the Gram Panchayats, with a key focus on water conservation, source sustainability, and rainwater storage. The JJM is also focusing on developing infrastructure for collection and basic treatment of domestic non-fecal wastewater, also called greywater, which typically accounts for nearly 80% of all domestic water.

OBJECTIVES

- The main objective is to develop skills and

| List of Training | | |
|------------------|--------------------|--------------------|
| Date | No of Participants | Venue |
| 21-24 Dec 2022 | 67 | Ranchi, Jharkhand |
| 26-29 Dec 2022 | 59 | Deoghar, Jharkhand |

knowledge of Sarpanches, Panchayat Secretaries, community leaders, and ISAs to plan and implement appropriate strategies for the Planning and implementation of JJM.

- To enhance understanding of PRIs and ISAs for planning and implementation of JJM with a focus on Village action plan preparation, Selection of technical options, including climate resilient, Quality of water supply construction works, Source strengthening, Greywater management, and Operation and maintenance of water supply scheme
- To motivate Sarpanches, Panchayat secretaries, and community leaders to take an active leadership role in mobilising communities for achieving the above objectives in a participatory manner for sustainable





results.

PARTICIPANTS

The workshop was organized for ground level functionaries including Mukhiya, Jalsahiya, ISA members, community leaders. Overall 126 participants attended the Training.

COORDINATION

The programme was coordinated by Dr Anjali Singh, Joint Director and Mr Ajit Mishra, Assistant Director, RCUES, Lucknow.

RCUES conducts training programme

The Regional Centre for Urban and Environmental Studies, Lucknow (RCUES), under Jal Jeevan Mission, conducted a two-day level II residential training programme on water audit, water accounting and energy audit of rural water supply schemes, recently. The participants were provided training on preparing water balance plan, water accounting and water audit. Participants were also trained on making water utilities energy efficient. Group exercises were also conducted to provide hands on training to the participants.

The inaugural session of the training programme was attended by Er AK Gupta, additional director;



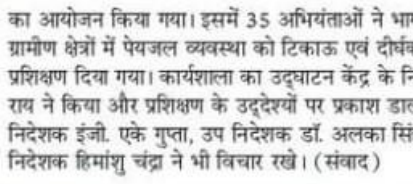
Himanshu Chandra, assistant director, RCUES, Lucknow. The programme was chaired by Dr Nishith Rai, director, RCUES. Dr Alka Singh, deputy director and in-charge of KRC RCUES was also present in the training for its smooth conduction.

These technical trainings are critical for the implementation of the Jal Jeevan Mission in its totality.

व्यावसायिक गतिविधि

ग्रामीण क्षेत्रों में पेयजल व्यवस्था दीर्घकालिक बनाने का प्रशिक्षण

लखनऊ (वि)। क्षेत्रीय नगर एवं पर्यावरण अध्ययन केंद्र (आरसीयूईएस) द्वारा जल जीवन मिशन के अंतर्गत वाटर ऑडिट एकाउंटिंग एंड एनर्जी ऑडिट ऑफ रूरल वाटर सप्लाई स्कीम पर दो दिवसीय कार्यशाला का आयोजन किया गया। इसमें 35 अभियंताओं ने भाग लिया। कार्यशाला में ग्रामीण क्षेत्रों में पेयजल व्यवस्था को टिकाऊ एवं दीर्घकालिक बनाने का प्रशिक्षण दिया गया। कार्यशाला का उद्घाटन केंद्र के निदेशक डॉ. निशीथ राय ने किया और प्रशिक्षण के उद्देश्यों पर प्रकाश डाला। केंद्र के अपर निदेशक इंजी. एके गुप्ता, उप निदेशक डॉ. अलका सिंह और सहायक निदेशक हिमांशु चंद्रा ने भी विचार रखे। (संवाद)



ऑडिट ऑफ रूरल वाटर सप्लाई स्कीम पर दो दिवसीय कार्यशाला का आयोजन किया गया। इसमें 35 अभियंताओं ने भाग लिया। कार्यशाला में ग्रामीण क्षेत्रों में पेयजल व्यवस्था को टिकाऊ एवं दीर्घकालिक बनाने का प्रशिक्षण दिया गया। कार्यशाला का उद्घाटन केंद्र के निदेशक डॉ. निशीथ राय ने किया और प्रशिक्षण के उद्देश्यों पर प्रकाश डाला। केंद्र के अपर निदेशक इंजी. एके गुप्ता, उप निदेशक डॉ. अलका सिंह और सहायक निदेशक हिमांशु चंद्रा ने भी विचार रखे। (संवाद)

जल जीवन मिशन में अभियंताओं को प्रशिक्षण

लखनऊ। जल जीवन मिशन के तहत वॉटर ऑडिट वॉटर एकाउंटिंग एंड एनर्जी ऑडिट ऑफ रूरल वाटर सप्लाई स्कीम पर दो दिवसीय आवासीय कार्यशाला का समापन शनिवार को हुआ। क्षेत्रीय नगर एवं पर्यावरण अध्ययन केंद्र व आवास और शहरी कार्य मंत्रालय भारत सरकार की ओर से जल जीवन मिशन के तहत कार्यशाला में जल निगम (ग्रामीण) विभाग के विभिन्न जनपदों के अधिशासी अभियंता, सहायक एवं अवर अभियंता तथा पंजाब राज्य के कुल 35 अभियंता रहे जिनको प्रशिक्षण दिया गया। उद्घाटन निदेशक डॉ. निशीथ राय ने किया।

परामर्शी अभियंताओं के लिए प्रशिक्षण



लखनऊ (वि)। क्षेत्रीय नगर एवं पर्यावरण अध्ययन केंद्र (आरसीयूईएस-लखनऊ) को पंचायती राज विभाग, उत्तर प्रदेश सरकार द्वारा रिसोर्स सेंटर नामित किया गया है। इसके अंतर्गत नवनियुक्त परामर्शी अभियंताओं के दो बैचों का शनिवार को केंद्र में उन्मुखीकरण प्रशिक्षण कार्यक्रम आयोजित किया गया। उद्घाटन केंद्र के अपर निदेशक इंजी. एके गुप्ता ने किया। प्रशिक्षण का उद्देश्य कार्यक्रमों व योजनाओं का प्रभावी कार्यान्वयन करना है। प्रशिक्षण में प्रदेश के पांच जिलों लखनऊ, बुलंदशहर, झांसी, कानपुर देहात और प्रतापगढ़ के 66 इंजीनियर भाग ले रहे हैं। (संवाद)

सरकार द्वारा रिसोर्स सेंटर नामित किया गया है। इसके अंतर्गत नवनियुक्त परामर्शी अभियंताओं के दो बैचों का शनिवार को केंद्र में उन्मुखीकरण प्रशिक्षण कार्यक्रम आयोजित किया गया। उद्घाटन केंद्र के अपर निदेशक इंजी. एके गुप्ता ने किया। प्रशिक्षण का उद्देश्य कार्यक्रमों व योजनाओं का प्रभावी कार्यान्वयन करना है। प्रशिक्षण में प्रदेश के पांच जिलों लखनऊ, बुलंदशहर, झांसी, कानपुर देहात और प्रतापगढ़ के 66 इंजीनियर भाग ले रहे हैं। (संवाद)



RCUES Lucknow organizes Orientation Training Programmes for Newly appointed Consulting Engineers under Panchayati Raj Dept

The Regional Centre for Urban and Environmental Studies Lucknow (RCUES) conducted 2 Batches of Orientation Training Programmes for newly appointed Consulting Engineers under Panchayati Raj Dept, Govt. of Uttar Pradesh on 17th Dec., 2022. The objective of the training is to orient and train the engineers on various parameters of designing and drawing of different structures, tendering process, procedure of measurement and entry of works executed in Gram Panchayats under Swachh Bhart Mission Grameen for effective implementation of various programmes and schemes being implemented in Gram Panchayats of Uttar Pradesh. The training is being attended by 66 Engineers from 5 districts of Uttar Pradesh. The programme was inaugurated by Additional Director, Er A.K. Gupta. Dr Alka Singh, Deputy Director, Himanshu Chandra and Dr Nasruddin, Assistant Director, RCUES were also present during the inaugural session.

DNA डेली न्यूज ऐक्टिविस्ट

ग्राम पंचायतों की स्वच्छता स्थिति को तकनीकी रूप से बेहतर बनाएं: एवे

लखनऊ। ग्रामीण क्षेत्रों में पेयजल व्यवस्था को टिकाऊ एवं दीर्घकालिक बनाने का प्रशिक्षण दिया गया। कार्यशाला का उद्घाटन केंद्र के निदेशक डॉ. निशीथ राय ने किया और प्रशिक्षण के उद्देश्यों पर प्रकाश डाला। केंद्र के अपर निदेशक इंजी. एके गुप्ता, उप निदेशक डॉ. अलका सिंह और सहायक निदेशक हिमांशु चंद्रा ने भी विचार रखे। (संवाद)



ऑडिट ऑफ रूरल वाटर सप्लाई स्कीम पर दो दिवसीय कार्यशाला का आयोजन किया गया। इसमें 35 अभियंताओं ने भाग लिया। कार्यशाला में ग्रामीण क्षेत्रों में पेयजल व्यवस्था को टिकाऊ एवं दीर्घकालिक बनाने का प्रशिक्षण दिया गया। कार्यशाला का उद्घाटन केंद्र के निदेशक डॉ. निशीथ राय ने किया और प्रशिक्षण के उद्देश्यों पर प्रकाश डाला। केंद्र के अपर निदेशक इंजी. एके गुप्ता, उप निदेशक डॉ. अलका सिंह और सहायक निदेशक हिमांशु चंद्रा ने भी विचार रखे। (संवाद)

ऑडिट ऑफ रूरल वाटर सप्लाई स्कीम पर दो दिवसीय कार्यशाला का आयोजन किया गया। इसमें 35 अभियंताओं ने भाग लिया। कार्यशाला में ग्रामीण क्षेत्रों में पेयजल व्यवस्था को टिकाऊ एवं दीर्घकालिक बनाने का प्रशिक्षण दिया गया। कार्यशाला का उद्घाटन केंद्र के निदेशक डॉ. निशीथ राय ने किया और प्रशिक्षण के उद्देश्यों पर प्रकाश डाला। केंद्र के अपर निदेशक इंजी. एके गुप्ता, उप निदेशक डॉ. अलका सिंह और सहायक निदेशक हिमांशु चंद्रा ने भी विचार रखे। (संवाद)

Training session for engineers

The Regional Centre for Urban and Environmental Studies, Lucknow, conducted an orientation programme for newly-appointed consulting engineers of UP Panchayati Raj department on Saturday. It was attended by 66 engineers from five districts - Bulandshahr, Jhansi, Kanpur Dehat and Pratapgarh. They were trained on various parameters of designing and drawing of structures.

66 अभियंताओं ने लिया प्रशिक्षण

एनबीटी, लखनऊ: पंचायतीराज विभाग की ओर से बनाए गए रिसोर्स सेंटर क्षेत्रीय नगर एवं पर्यावरण अध्ययन केंद्र में शनिवार को नवनियुक्त अभियंताओं को स्वच्छ भारत मिशन के तहत आडीएफ प्लस के दूसरे चरण को लेकर प्रशिक्षण दिया गया। इस मौके पर डॉ. अलका सिंह, उप निदेशक हिमांशु चंद्रा और डॉ. नसरुद्दीन भी मौजूद रहे। अधिकारियों ने बताया कि इस बीच लखनऊ, बुलंदशहर, झांसी, कानपुर देहात और प्रतापगढ़ के 66 इंजीनियरों ने स्वच्छ भारत मिशन से जुड़ी योजनाओं को लेकर प्रशिक्षण लिया।

Upcoming Campus of RCUES at Indira Nagar, Lucknow



PREPARATION OF CITY SOLID WASTE ACTION PLAN (CSWAP)

The vision of SBM 2.0 for scientific Municipal Solid Waste Management (MSWM) is that cities will ensure segregation of waste at source, process waste in segregated fractions, recover resources and recycle to the maximum extent and minimize landfilling to 20% or less (including reject material coming out of processing). Cities must be seen to be clean 360 o , duly remediating the legacy dumpsites. Further, Cities with non-conforming air quality need to replace the common manual street sweeping with air quality friendly mechanical sweeping and process the C&D wastes as well.

As a first step in fulfilling the vision, Regional Centre for Urban and Environmental Studies (RCUES) in MoU with Construction & Design Services (C&DS), U.P. Jal Nigam provided handholding support to all the 756 ULBs of Uttar Pradesh in preparation of the CSWAP, duly identifying the existing MSWM system, existing waste generation, projected waste generation, segregation as wet and dry waste, the available processing capacity and the gap thereof. The CSWAP also captured the gaps in dumpsite remediation, mechanical sweeping and C & D waste processing facilities. The Estimated cost for proposed components as per GAP analysis and Financing Planning of fund required for addressing the Gaps were done based on the norms given the operational guidelines of SBM 2.0- Urban. Funds will be available for addressing the assessed gaps based on the funding mechanism for the SWM projects with GoI share, State share and ULB share on pre-defined norms. The CSWAP of different ULBs were prepared as per the templates of CSWAP given in the SBM 2.0-Urban.

The targeted outcomes of scientific MSWM were also be brought out in the CSWAP such as:

- timelines for implementation of required infrastructure,
- timelines for achieving stages of Star Rating under GFC protocol. A minimum 3 Star Rating will be achieved before the end of mission.

Functional Areas: - Overall Municipal Solid Waste Management focussing on the processing of the following categories which can be implemented simultaneously as independent projects: -

(i) MSW Processing Plant – Composting Plant/Bio-Methanation Plant for Wet and MRF cum RDF

Plant for Dry Waste

(ii) Legacy Dumpsites Remediation Plant

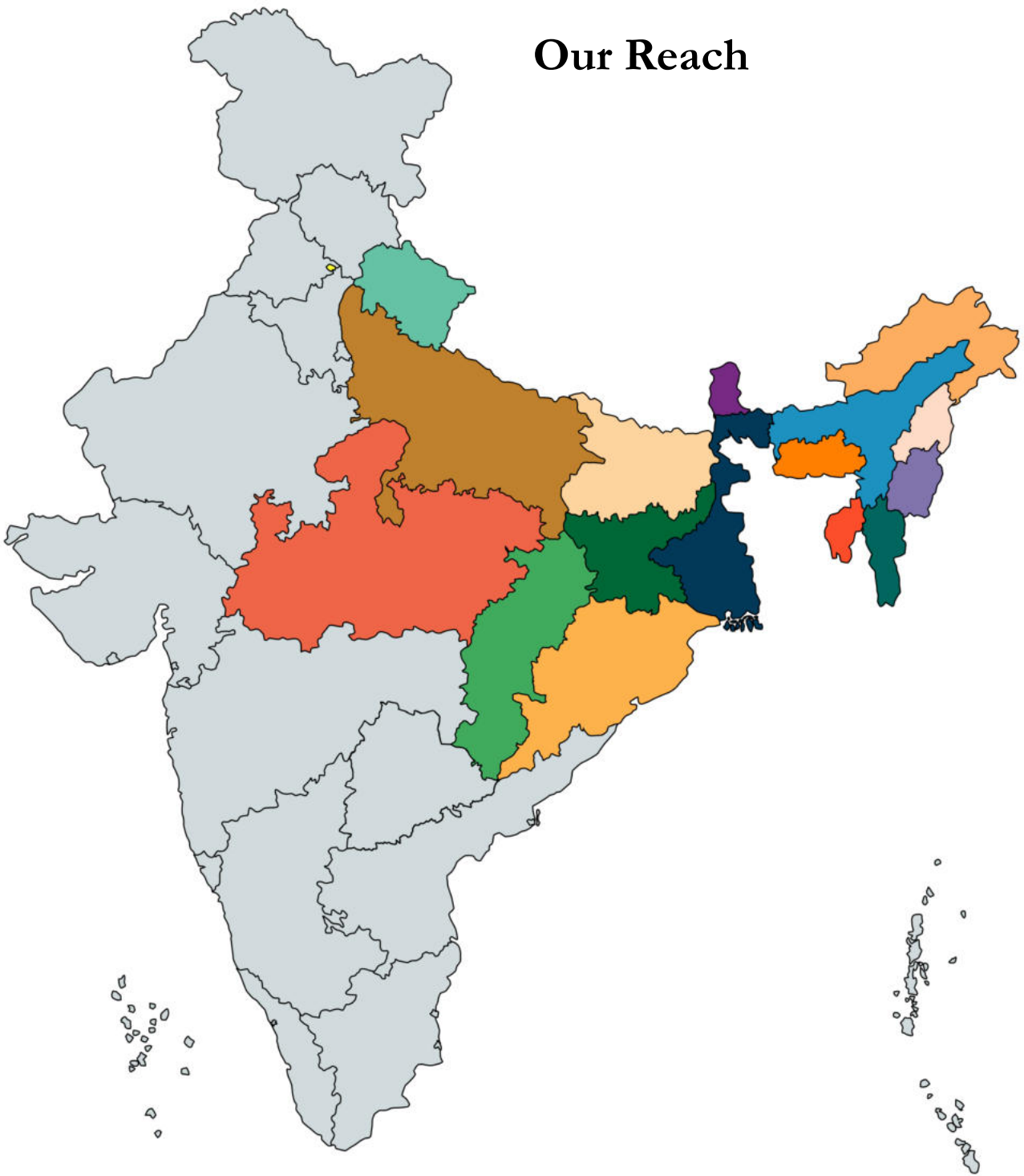
(iii) C&D Waste Processing Plant for cities with non-conforming air quality as per National Clean Air Program (NCAP)

(iv) Mechanical Sweepers for Road Sweeping for cities with non-conforming air quality as per NCAP

(v) Sanitary Land Fills (SLFs)

(vi) Transfer Station for Secondary Storage of Waste.

Our Reach



For further details contact:

**Regional Centre for Urban & Environmental
Studies, Lucknow**

Adjacent Registrar's Office, Lucknow University
Campus, Lucknow, Uttar Pradesh- 226007

Ph: 0522-2740-165

Fax: 0522-2740-165

Email: rcueslucknow@gmail.com

www.rcueslucknow.org

क्षेत्रीय नगर एवं पर्यावरण अध्ययन केन्द्र, लखनऊ

(आवासन एवं शहरी कार्य मंत्रालय, भारत सरकार)

लखनऊ विश्वविद्यालय परिसर, कुलसचिव कार्यालय के
समीप, लखनऊ २२००७

फोन: 0522-2740-165 (टेलीफैक्स)

rcueslucknow@gmail.com

www.rcueslucknow.org