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RCUES, Mumbai
Enabling better cities...

Urban Environ Vision

An Information Bulletin

Regional Centre for Urban & Environmental Studies
All India Institute of Local Self-Government, Mumbai

Established in the year 1968, is fully supported by the Ministry of Housing and Urban Affairs, Government of India

Urban Environ Vision aims to take its readers through the Web-Based / Face to Face training programmes of RCUES, Mumbai while providing encouragement and knowledge to its participants and displays the efforts undertaken by RCUES, Mumbai.

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Section

01

Regional Specialized Web-Based Training Programme on

Information System Improvement at ULB Level

04th - 05th February, 2022

Key Highlight

The key highlight of this web-based training programme was that the participants updated their knowledge on the pivotal role of e-governance system in effective service delivery at ULB level, in order to replicate it in their cities.

BACKGROUND

The challenges of the urban sector in India are growing rapidly, and the government agencies at various levels are taking steps to address the gaps in service delivery. One of the important steps towards this, is the introduction of the appropriate systems for information management, performance monitoring, and benchmarking. Performance monitoring and benchmarking require the collection and analysis of reliable and accurate performance data of service provider operations. The availability of such data depends on the use and management of the information system.

Basic services provided in urban areas are continually undergoing a process of change and improvement. Administrative functions also complicate the ability to make prompt and accurate decisions. It is especially important for urban local governments, which provide technical services in urban areas, to have fast and reliable access to updated map bases and other spatial information. The Central and State governments are massive organisations with many departments and a very large number of people under their employment. These organisations need to function efficiently through proper communication and should have quick access to accurate information at all times so that decisions can be made quickly and appropriately. The MIS is indispensable for accomplishing these tasks. The Urban Local Bodies (ULBs) require a comprehensive information system for planning, management and de-centralised governance in the implementation of effective service delivery. The MIS will support spatial requirements of urban planning and help the ULBs to develop town level urban database.

Considering this background, the Regional Centre for Urban & Environmental Studies (RCUES) of All India Institute of Local Self Government (AIILSG), Mumbai conducted a **Regional Specialized Web-Based Training Programme on 'Information System Improvement at ULB Level' on 4th - 5th February 2022. This training programme was supported by the Ministry**

of Housing & Urban Affairs (MoHUA), Government of India (GoI).

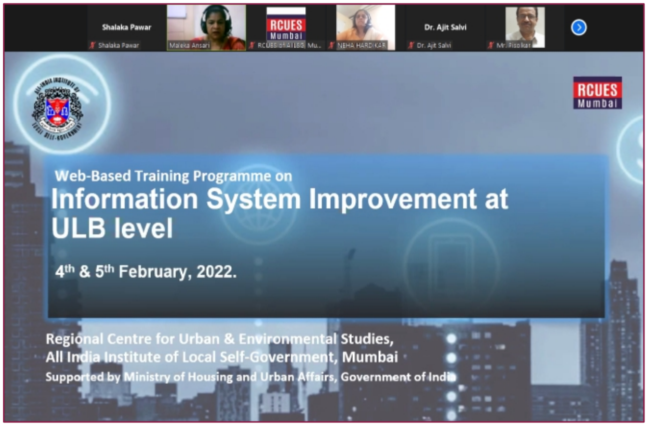
KEY OBJECTIVE

The key objective of this web-based training programme was to develop the measures to improve information system at ULB level by addressing the gaps for sustainable service delivery.

PARTICIPATION

In all, 27 participants comprising Mayors, Municipal Engineers, State Mission Managers, MIS/IT Experts, Sanitary Inspectors, Health Workers, Community Organizers from the states of Maharashtra, Rajasthan, Gujarat and Goa attended this web-based training programme.

INTRODUCTION


Shalaka Pawar
Shalaka Pawar
Maleka Ansari
RCUES Mumbai
RCUES of AIILSG Mu...
NEHA HARDIKAR
Dr. Ajit Salvi
Dr. Ajit Salvi
Mr. Pisolkar
RCUES Mumbai

Web-Based Training Programme on

Information System Improvement at ULB level

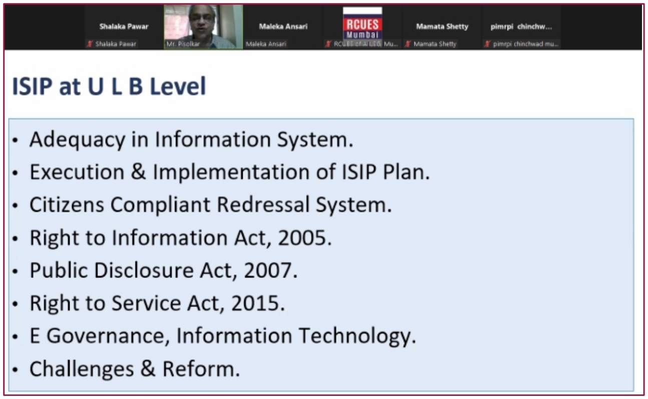
4th & 5th February, 2022.

Regional Centre for Urban & Environmental Studies,
All India Institute of Local Self-Government, Mumbai
Supported by Ministry of Housing and Urban Affairs, Government of India

Ms. Maleka Ansari, Sr. Research Officer, RCUES of AIILSG, Mumbai addressing the participants.

This web-based training programme started with the welcoming of the distinguished trainers and participants by Ms. Maleka Ansari, Sr. Research Officer, RCUES of AIILSG, Mumbai. She explained the objective of conducting this training programme by stating that ULBs play a vital role in effective implementation of service delivery. The appropriate data / information pertaining to various services need to be available at ULB level. She mentioned the need of this training programme by saying that ULBs have to develop measures to keep and maintain the records for sustainable service delivery. She later requested the subject trainers to begin the technical sessions.

TECHNICAL SESSIONS


Shalaka Pawar
Shalaka Pawar
Mr. Pisolkar
Maleka Ansari
Maleka Ansari
RCUES Mumbai
RCUES of AIILSG Mu...
Mamata Shetty
Mamata Shetty
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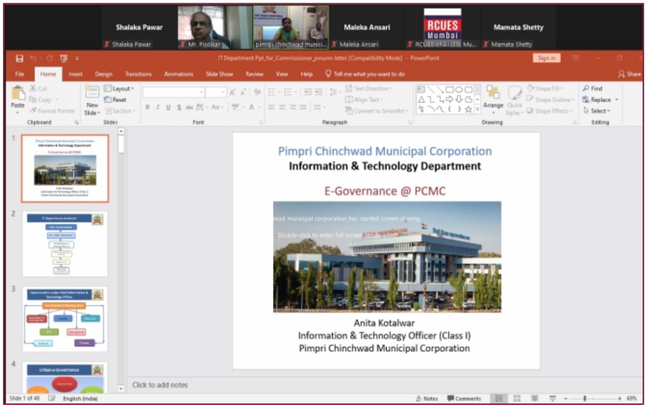
ISIP at U L B Level

- Adequacy in Information System.
- Execution & Implementation of ISIP Plan.
- Citizens Compliant Redressal System.
- Right to Information Act, 2005.
- Public Disclosure Act, 2007.
- Right to Service Act, 2015.
- E Governance, Information Technology.
- Challenges & Reform.

Mr. P. C. Pisolkar, former Chief Municipal Auditor, Municipal Corporation of Greater Mumbai (MCGM) & Sr. Faculty, AIILSG, Mumbai addressing the participants.

The first session on 'Overview of Information System Improvement Plan (ISIP) in ULBs' was delivered by Mr. P. C. Pisolkar, former Chief Municipal Auditor, Municipal Corporation of Greater Mumbai (MCGM) & Sr. Faculty, AIILSG, Mumbai. He started his session by emphasizing on availability of precise information system. He said that due to the pandemic and extended lockdown, citizens' mobility was reduced, hence adequate information about the services has to be made available to the citizens at a glance by developing website. Furthermore, citizens require updated information systems to acquire real time information in urban service delivery. He explained that adequacy in Information System is required for execution and implementation of ISIP Plan. He said that the citizens' complaint redressal system has to be developed in order to lodge a complaint towards non availability of urban services. He added that the information system can be developed with new available technologies. He further explained about implementation of Right to Public Services Act, 2015, by saying that for effective service delivery, of the Act is essential for transparent, efficient and time bound urban service delivery. He also explained about implementation of Right to Information Act (RTI), 2005, where the information requested by citizens has to be provided with accuracy and transparency. He also talked on The Mumbai Municipal Corporation Act under which disclosure of information shall include the publication of the information through newspapers, internet, notice boards of the municipal corporation offices etc. He also spoke on challenges in implementation of Public Disclosure Act. He concluded his session by saying that information system plays a significant role in ULBs for every single service provided which requires periodical updating for effective and transparent urban services.



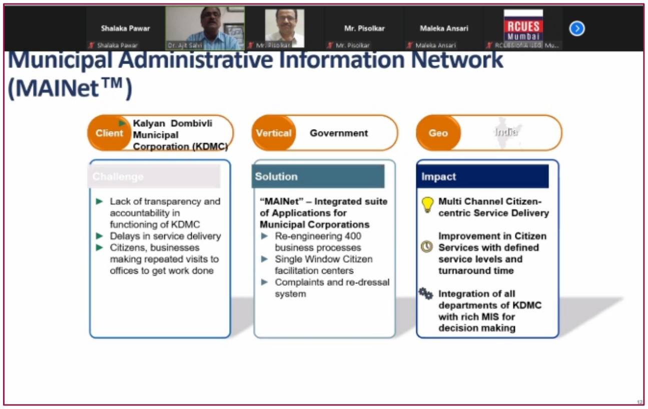
Pimpri Chinchwad Municipal Corporation
Information & Technology Department

E-Governance @ PCMC

Anita Kotalwar
Information & Technology Officer (Class I)
Pimpri Chinchwad Municipal Corporation

Ms. Anita Kotalwar, E-governance and IT Expert, Pimpri Chinchwad Municipal Corporation (PCMC), Pimpri addressing the participants.

The next session on 'Application of Management Information System (MIS) for Effective Service Delivery in ULBs' was conducted by Ms. Anita Kotalwar, E-governance and IT Expert, Pimpri Chinchwad Municipal Corporation (PCMC), Pimpri. She started her session by highlighting on implementation of E-governance at PCMC, Maharashtra. She said that PCMC is a standout example of how integrated E-governance can improve urban service delivery. She added that most of the Indian cities are confounded by the challenge of delivering public services to a rapidly growing urban population. Decades of neglect through little investment in urban infrastructure and decaying systems of service delivery with growing inefficiency have reflected that incremental solutions will not work. In such a situation, e-governance can provide tremendous opportunities for progressing in service delivery in a transparent and accountable manner. She further said that PCMC has used e-governance as a critical tool in its strategy for better urban planning and management so as to bring about significant improvements in the ease of living and in the ease of getting services in the city. She also explained that the e-governance system at PCMC facilitated back-end integration across the different government departments to ensure enhanced operational efficiency. She talked on PCMC's financial accounting system through e-governance and said that this accounting system has an interface for other departmental applications to automatically push income (receipts) and expense (bills) transactions using a mechanism called Web Services API (Application Programming Interface). Other departments can now monitor this journey of their bills in the accounts department's bill passing workflow rather than tracking it manually. She elucidated that currently PCMC has developed 64 facilitation centers, one in each municipal ward to cater the services to citizens such as birth, death and marriage certificates, water bill, property tax bill etc. Besides, in an innovative attempt to bridge the information gap, PCMC launched SARATHI (System of Assisting Residents and Tourists through Helpline Information) on 15th August 2013. SARATHI provides basic information on all services. She concluded her session by highlighting that e-governance system is an effective tool in implementation of urban service delivery in cities.



Municipal Administrative Information Network (MAINet™)

Client Kalyan Dombivli Municipal Corporation (KDMC)

Vertical Government

Geo India

Challenge

- Lack of transparency and accountability in functioning of KDMC
- Delays in service delivery
- Citizens, businesses making repeated visits to offices to get work done

Solution

"MAINet" – Integrated suite of Applications for Municipal Corporations

- Re-engineering 400 business processes
- Single Window Citizen facilitation centers
- Complaints and re-dressal system

Impact

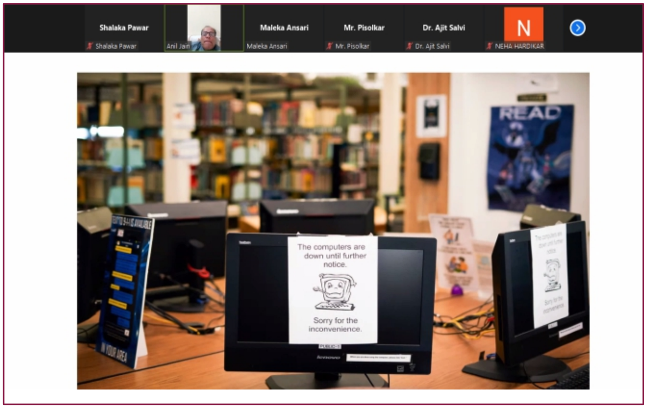
Multi Channel Citizen-centric Service Delivery

Improvement in Citizen Services with defined service levels and turnaround time

Integration of all departments of KDMC with rich MIS for decision making

Dr. Ajit Salvi, Dy. Chief Engineer, Mumbai Sewerage Disposal Project (MSDP), MCGM, Mumbai addressing the participants.

On the second day, the session on 'Good Governance and Sustainable Development' was conducted by Dr. Ajit Salvi, Dy. Chief Engineer, Mumbai Sewerage Disposal Project (MSDP), MCGM, Mumbai. He started his session by focusing on good governance. He explained further that good governance can be achieved through effective e-governance application system. He gave the background of how e-governance comes into existence due to the increasing importance of electronics in 1970. The subsequent establishment of the National Informatics Centre (NIC) in 1977 was the first major step towards e-governance in India. He said that many government departments started using Information & Communication Technology (ICT) for a number of applications like tracking movement of papers and files, monitoring of development programmes, processing of employees' pay rolls, generation of reports etc. The main thrust for e-governance was provided by the launching of the national satellite-based computer network (NICNET) in 1987. In 1999, the Union Ministry of Information Technology was created and by 2000, a 12-point minimum agenda for e-governance was identified by Government of India for implementation in all Union Government Ministries/Departments. He later stated that the key objective of e-governance were to increase government and citizen interaction, encouraging citizen participation, bringing transparency in the governing process and making the government accountable. He also spoke on the structure and advantages of e-governance and how good governance emerges sustainable development in cities. He explained Municipal Administrative Information Network (MAINet), which is integrated in municipal services by showing challenges at ULB level such as lack of transparency and accountability in functioning of an ULB and delays in service delivery, which can be resolved by single window citizen facilitation centers and complaints and redressal system. This solution shows improvement in citizen services with defined service levels and turnaround time and integration of all departments of an ULB with an exhaustive MIS for decision making. He later explained the need for MIS and how it is interlinked to good governance and sustainable development. He said that the framework for implementation of a monitoring system improves accountability and transparency. He concluded his session by speaking on environmental, social, technical and economic challenges of e-governance which needs to be addressed at ULB level to achieve good governance and sustainable development in cities.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Anil Jain
Maleka Ansari
Maleka Ansari
Mr. Pisolkar
Mr. Pisolkar
Dr. Ajit Salvi
Dr. Ajit Salvi
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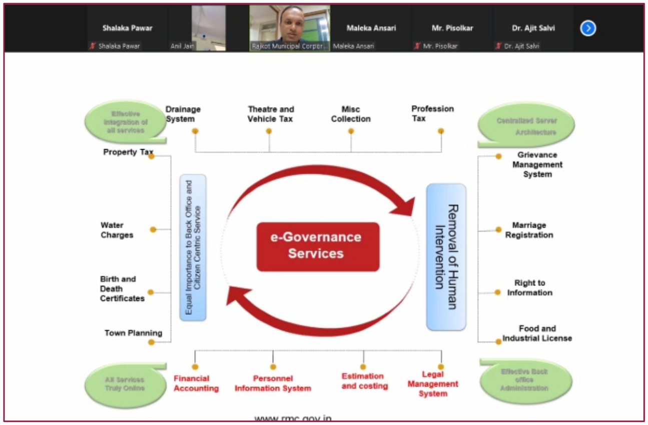
NEHA HARDIKAR
READ
The computers are down until further notice.
Sorry for the inconvenience.

Mr. Anil Kumar Jain, former Additional Chief Engineer, Public Health Engineering Department (PHED), Jaipur, Government of Rajasthan addressing the participants.

The next session on 'Good Practices of MIS/E-governance in Service Delivery at ULB Level – Case of Ajmer' was conducted by Mr. Anil Kumar Jain, former Additional Chief Engineer, Public Health Engineering Department (PHED), Jaipur, Government of Rajasthan. He started his session by focusing on e-governance as a crucial part in ULB functioning. He spoke on ancient methods of keeping/maintaining records which were time consuming, error prone and having absence of real time monitoring. He mentioned that as a need of the hour, Information Technology (IT) system came into existence and became a part of life. Though government departments took time to take over the technology due to manual hurdles, gradually they learnt this new system. He later explained the new trends in IT in Ajmer Municipal Corporation (AMC) as a good practice. Efforts at e-governance in AMC started as a result of statewide initiatives. More than 20 e-governance modules have been operationalized. AMC has made property tax records, birth/death certificates, application for various licenses and booking of community centers / parks services available through online system. He added that AMC has also developed Ajmer Citizen Mobile App through SMART City to understand the real time monitoring. Furthermore, financial file tracking system is developed. He concluded his session by talking on the way forward in e-governance in ULBs. He mentioned that Supervisory Control and Data Acquisition (SCADA) system needs to be promoted for water treatment plants. Web portals and dedicated mobile apps have to be developed for implementation of e-governance, which enhances transparency and accountability in service delivery at city level.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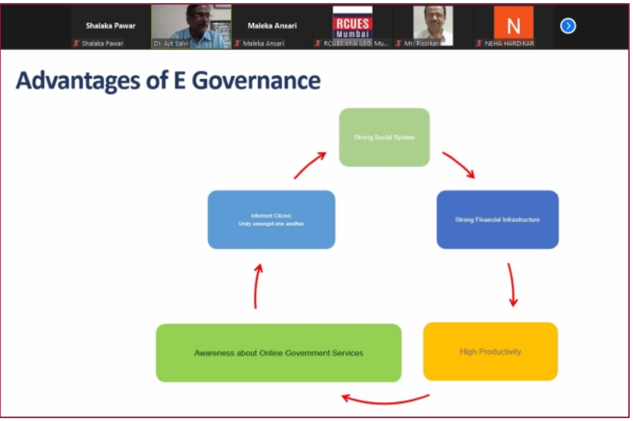
Shalaka Pawar
Anil Jain
Rajkot Municipal Corpor...
Maleka Ansari
Maleka Ansari
Mr. Pisolkar
Mr. Pisolkar
Dr. Ajit Salvi
Dr. Ajit Salvi
Effective Integration of all services
Drainage System
Theatre and Vehicle Tax
Misc Collection
Profession Tax
Centralized Server Architecture
Property Tax
Water Charges
Birth and Death Certificates
Town Planning
Equal Importance to Back Office and Citizen Centric Service
e-Governance Services
Removal of Human Intervention
Grievance Management System
Marriage Registration
Right to Information
Food and Industrial License
All Services Truly Online
Financial Accounting
Personnel Information System
Estimation and costing
Legal Management System
Effective Back office Administration
www.rmc.gov.in

Mr. S. M. Gohil, Director, Department of Information & Technology, Rajkot Municipal Corporation (RMC) & General Manager (Rajkot SMART City Development Ltd.), Gujarat addressing the participants.

The last session on 'Good Practices of MIS/E-governance in Service Delivery at ULB Level – Case of Rajkot' was delivered by Mr. S. M. Gohil, Director, Department of Information & Technology, Rajkot Municipal Corporation (RMC) & General Manager (Rajkot SMART City Development Ltd.), Gujarat. He started his session by focusing on effective implementation of service delivery through e-govenance. He said that RMC has bagged a national award for e-governance in innovative use of technology in e-governance. He further said that RMC has designed and developed Rajkot Smart City Portal under the Smart City Initiative for government's departments which enables access to a wide range of information using Geo-Spatial Technology. The Portal can be used to search information related to property, ward, public utilities and other location based services. He talked on innovative ideas undertaken by RMC by explaining Geographical Information System (GIS) project. He added that RMC has used GPR Technology to map 4200 KM with underground utility mapping technique by creating more than 95 layers. RMC provides several services like property tax bills and receipts, professional tax bills, birth-death certificates, marriage registration on WhatsApp chatbot to the citizens through registering their requirements / complaints on WhatsApp. He concluded his session by emphasizing on using Artificial Intelligence (AI) in good governance and sustainable development.

GLIMPSES OF THE WEB-BASED TRAINING PROGRAMME


Shalaka Pawar
Dr. Ajit Salvi
Maleka Ansari
RCUES Mumbai
Mr. Pisolkar
NEHA HARDIKAR

Advantages of E Governance

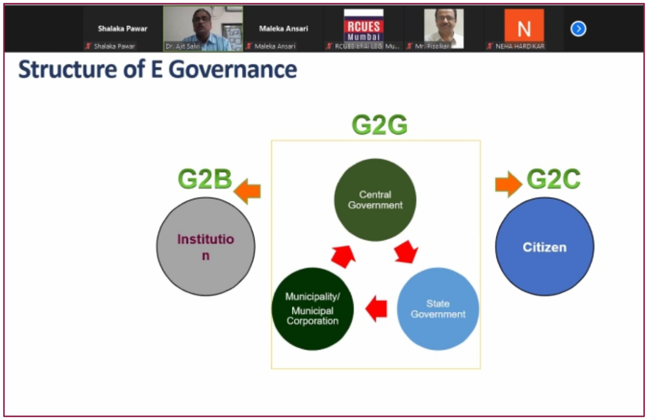
Strong Social System

Strong Financial Infrastructure

High Productivity

Awareness about Online Government Services

Informed Citizen;
Unity amongst one another


Shalaka Pawar
Dr. Ajit Salvi
Maleka Ansari
RCUES Mumbai
Mr. Pisolkar
NEHA HARDIKAR

Structure of E Governance

G2G

G2B

G2C

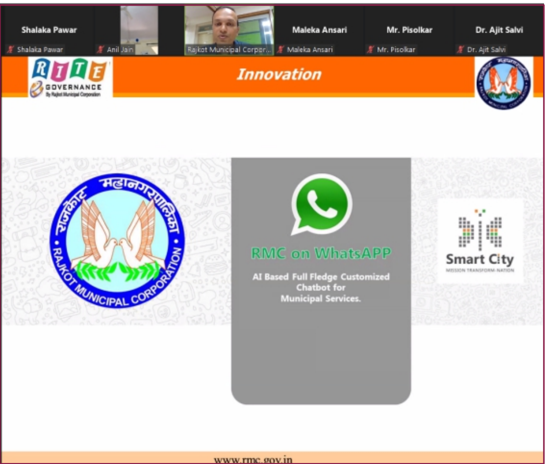
Institutio
n

Central Government

State Government

Municipality/ Municipal Corporation

Citizen

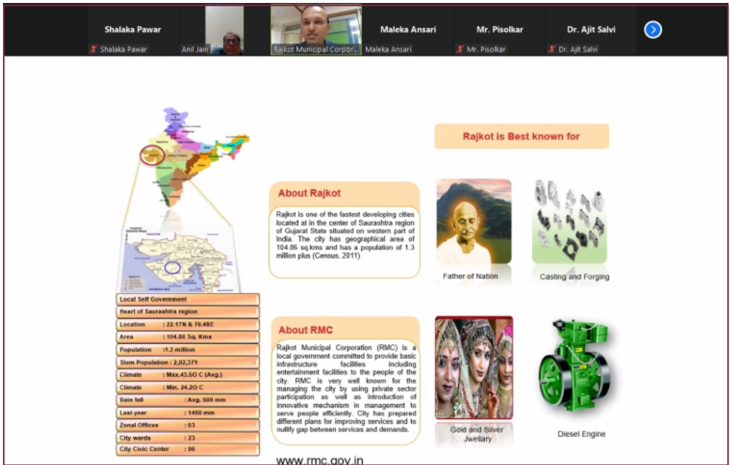

Shalaka Pawar
Anil Jain
Rajkot Municipal Corpor...
Maleka Ansari
Mr. Pisolkar
Dr. Ajit Salvi
RITE GOVERNANCE By Rajkot Municipal Corporation
Smart City
MISSION TRANSFORM-NATION

Innovation

RMC on WhatsAPP

AI Based Full Fledge Customized Chatbot for Municipal Services.

www.rmc.gov.in


Shalaka Pawar
Anil Jain
Rajkot Municipal Corpor...
Maleka Ansari
Mr. Pisolkar
Dr. Ajit Salvi

Local Self Government
Heart of Saurashtra region
Location : 22.17N & 70.48E
Area : 104.86 Sq. Kms
Population :1.3 million
Slum Population : 2,02,371
Climate : Max.43.5O C (Avg.)
Climate : Min. 24.2O C
Rain fall : Avg. 500 mm
Last year : 1460 mm
Zonal Offices : 03
City wards : 23
City Civic Center : 06

About Rajkot

Rajkot is one of the fastest developing cities located at in the center of Saurashtra region of Gujarat State situated on western part of India. The city has geographical area of 104.86 sq.kms and has a population of 1.3 million plus (Census, 2011)

About RMC

Rajkot Municipal Corporation (RMC) is a local government committed to provide basic infrastructure facilities including entertainment facilities to the people of the city. RMC is very well known for the managing the city by using private sector participation as well as introduction of innovative mechanism in management to serve people efficiently. City has prepared different plans for improving services and to nullify gap between services and demands.

Rajkot is Best known for

Father of Nation

Casting and Forging

Gold and Silver Jwellary

Diesel Engine

www.rmc.gov.in

Section

02

Regional Specialized Web Based Training Programme on

Jal Jeevan Mission - Urban

10th- 11th February, 2022

Key Highlight

The key highlight of this web-based training programme was that the participants got themselves updated about the process of treating wastewater for non-potable uses and understood the practical aspects of the similar initiatives in order to replicate and scale up in their cities.

BACKGROUND

Jal Jeevan Mission (Urban) is a step towards AatmaNirbhar Bharat with the aim of making the cities 'water secure' and providing functional water tap connections to all the households. This will be achieved through circular economy of water by ensuring water source conservation, rejuvenation of water bodies and wells, recycle/reuse of treated used water, and rainwater harvesting by involving community at large. This Mission will be run as peoples' programme in a Mission mode i.e. Jan Aandolan. Mission also targets to provide 100% sewage/ septage management in 500 AMRUT cities. The Mission has a reform agenda focused towards financial sustainability and water security of Urban Local Bodies (ULBs). Meeting 20% of water demand through recycled water, reducing non-revenue water to less than 20% and rejuvenation of water bodies are major water related reforms with focus on strengthening of ULBs and water security of the cities. Major reforms aim at reducing non-revenue water to below 20%; recycle of treated wastewater to meet at least 20% of total city water demand and 40% for industrial water demand at State level. Rejuvenation of water bodies to augment sustainable fresh water supply and creating green spaces and sponge cities to reduce floods and enhance amenity value through an Urban Aquifer Management Plan are other key areas of the Mission. Information, Education and Communication (IEC) campaign is proposed to spread awareness among masses about conservation of water. Pey Jal Survekshan will be conducted in cities to ascertain equitable distribution of water, reuse of wastewater and mapping of water bodies with respect to quantity and quality of water through a challenge process.

City Water Balance Plans (CWBPs) will comprise details of water sources including water bodies, water treatment and distribution infrastructure, area-wise water coverage, status of Non-Revenue Water (NRW) and sewerage network including Sewage Treatment Plants (STPs) etc. Baseline data on household water tap and sewer/septage connections in the cities will be compiled and gaps in service delivery will be worked out at ULB level.

Considering this background, the Regional Centre for Urban & Environmental Studies (RCUES) of All India Institute of Local Self Government (AIILSG), Mumbai conducted a **Regional Specialized Web-Based Training Programme on 'Jal Jeevan Mission - Urban' on 10th - 11th February 2022. This training programme was supported by the Ministry of Housing & Urban Affairs (MoHUA), Government of India (GoI).**

KEY OBJECTIVE

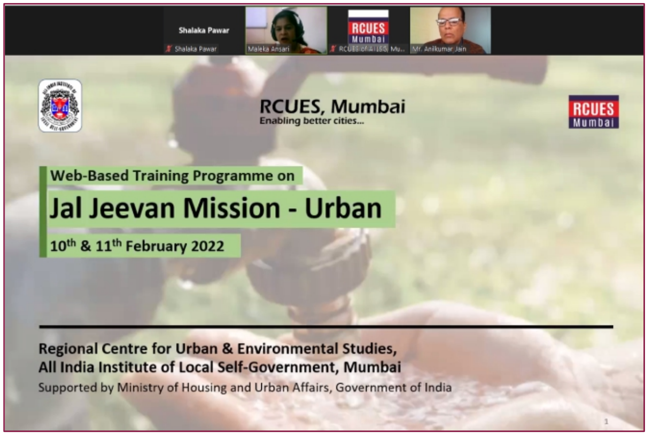
The key objective of this web-based training programme was to encourage ULBs to assess and estimate gaps in household tap connections and sewer connections to ensure equal distribution of water at city level.

PARTICIPATION

In all, 42 participants comprising Hon'ble Mayors, Elected Representatives, Municipal Commissioners, Chief Officers, Municipal Engineers, City Project Officers, Office superintendent, City Coordinators, Sanitary Inspectors, Health Workers from the states of Maharashtra, Gujarat, Rajasthan and Assam attended this training programme.

INTRODUCTION

This web-based training programme was commenced by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai. She welcomed the distinguished trainers and the participants and explained the objective of this web-based training programme. She said that Jal Jeevan Mission is newly launched mission by the MoHUA, GoI. It is a step towards AtmaNirbhar Bharat by making water secure cities. She further said that in order to achieve the status of secure cities, reuse of wastewater, mapping of water bodies for their conservation are significant measures to ensure equal distribution of water. She told the participants to make the most of the knowledge as would be imparted through technical sessions and requested the subject experts to start the sessions.



RCUES, Mumbai
Enabling better cities...

Web-Based Training Programme on
Jal Jeevan Mission - Urban
10th & 11th February 2022

Regional Centre for Urban & Environmental Studies,
All India Institute of Local Self-Government, Mumbai
Supported by Ministry of Housing and Urban Affairs, Government of India

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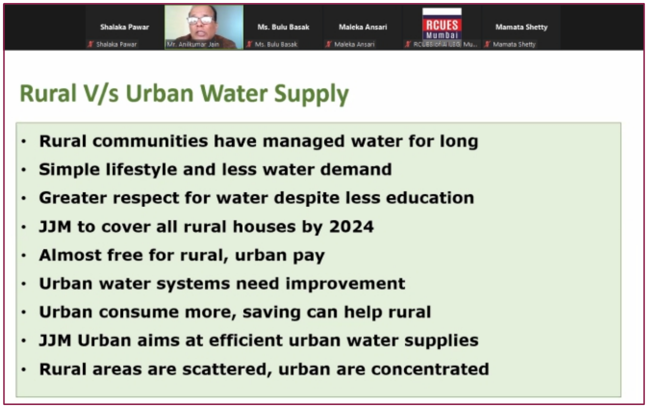
Ms. Maleka Ansari, Sr. Research Officer, RCUES of AIILSG, Mumbai addressing the participants.

TECHNICAL SESSIONS

The first technical session on 'Introduction to Jal Jeevan Mission – Urban (JJM-U)' was delivered by Mr. Anil Kumar Jain, former Additional Chief Engineer, Public Health Engineering Department (PHED), Jaipur, Government of Rajasthan. He started his session by giving emphasis on the scenario of urban water supply in cities. He said that demand of water supply increases due to increasing population in cities. Tap water being the only source of receiving water to citizens, the quantity of water supply is inadequate. This emerges the need for conservation of water, recycle and reuse of wastewater etc. He highlighted issues in water supply by mentioning that the


Shalaka Pawar
Mr. Anilkumar Jain
Ms. Bulu Basak
Maleka Ansari
RCUES Mumbai
Mamata Shetty

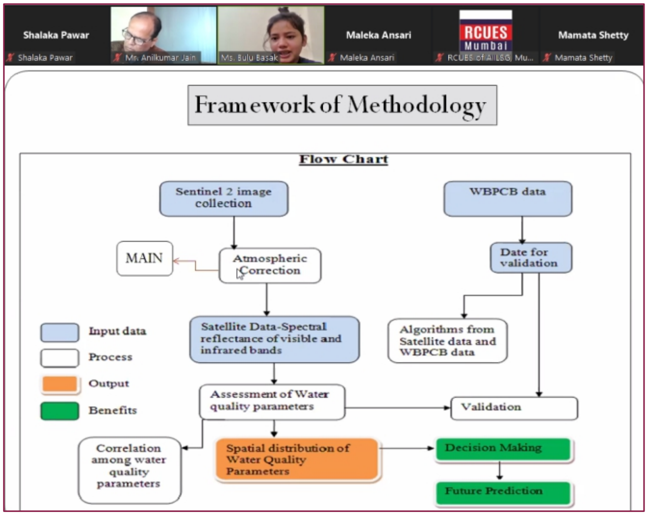
Rural V/s Urban Water Supply

- Rural communities have managed water for long
- Simple lifestyle and less water demand
- Greater respect for water despite less education
- JJM to cover all rural houses by 2024
- Almost free for rural, urban pay
- Urban water systems need improvement
- Urban consume more, saving can help rural
- JJM Urban aims at efficient urban water supplies
- Rural areas are scattered, urban are concentrated

Mr. Anil Kumar Jain, former Additional Chief Engineer, Public Health Engineering Department (PHED), Jaipur, Government of Rajasthan addressing the participants.

percentage of NRW has to be reduced to provide the adequate water supply to citizens. He then talked on JJM-U, which aims to cover gap of 2.68 crore household taps and 2.64 crore sewer connections in urban areas. He said that JJM-U will promote recycle/reuse of treated sewage and rejuvenation of water bodies for sustainable fresh water. This will meet 20% of water demand by cities. He further said that the total outlay allocated for JJM-U is Rs.2,87,000 crore and ULBs need to strengthen themselves and geared up for effective implementation of JJM-U. He explained the funding pattern for JJM-U by stating the percentages of share by central, state and ULBs respectively. He concluded his session by giving significance of JJM-U implementation for equitable distribution of tap water and achieve water security in cities.

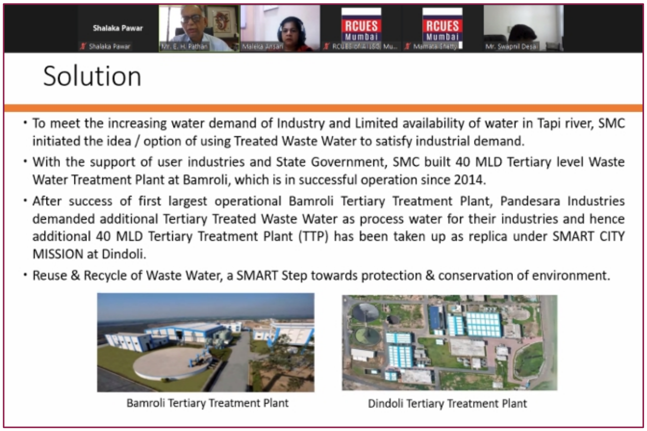
The next session on 'Geospatial Technology and Water Resource Management' was delivered by Ms. Bulu Basak, Faculty – Geographic Information Systems (GIS) Division, South Asian Institute for Advanced Research and Development (SAIARD), Jaipur, Rajasthan. She started the session by giving emphasis on water management. She said that the main causes


Shalaka Pawar
Mr. Anilkumar Jain
Ms. Bulu Basak
Maleka Ansari
RCUES Mumbai
Mamata Shetty
Flow Chart
Sentinel 2 image collection
WBPCB data
MAIN
Atmospheric Correction
Date for validation
Input data
Process
Output
Benefits
Satellite Data-Spectral reflectance of visible and infrared bands
Algorithms from Satellite data and WBPCB data
Assessment of Water quality parameters
Validation
Correlation among water quality parameters
Spatial distribution of Water Quality Parameters
Decision Making
Future Prediction

Framework of Methodology

Ms. Bulu Basak, Faculty – Geographic Information Systems (GIS) Division, South Asian Institute for Advanced Research and Development (SAIARD), Jaipur, Rajasthan addressing the participants.

of water pollution are domestic sewage, factories' effluents, and agriculture waste which can lead to deterioration of water quality affecting most freshwater and the health of ecosystems in the world. Collection of water samples for subsequent laboratory analyses serve their purpose for a point in time and space, but do not give either the spatial or temporal view of water quality in a wider space. She added that water quality monitoring programme is most important in order to raise awareness of public by addressing the consequences of present and future threats of contamination of water resources. She explained that GIS is an effective tool for storing, managing, and displaying spatial data often encountered in water resources management. The application of GIS in water resources is constantly on the upsurge. She added that remote sensing provides critical data sources for mapping water resources and changes, while GIS provides the best tool for water resource management as it helps in the collection, storage, analysis, and visualization of key information and thereby help with the development of effective water resource programmes and practices. She concluded her session by highlighting the significance of geospatial technology in ground water resources and its conservation at city level.



Solution

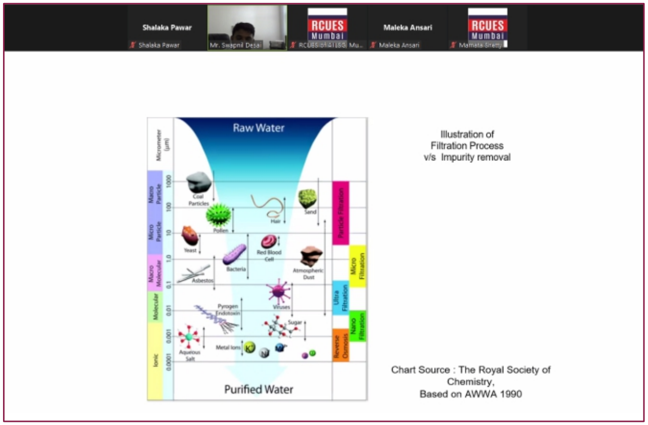
- To meet the increasing water demand of Industry and Limited availability of water in Tapi river, SMC initiated the idea / option of using Treated Waste Water to satisfy industrial demand.
- With the support of user industries and State Government, SMC built 40 MLD Tertiary level Waste Water Treatment Plant at Bamroli, which is in successful operation since 2014.
- After success of first largest operational Bamroli Tertiary Treatment Plant, Pandesara Industries demanded additional Tertiary Treated Waste Water as process water for their industries and hence additional 40 MLD Tertiary Treatment Plant (TTP) has been taken up as replica under SMART CITY MISSION at Dindoli.
- Reuse & Recycle of Waste Water, a SMART Step towards protection & conservation of environment.

Bamroli Tertiary Treatment Plant

Dindoli Tertiary Treatment Plant

Mr. E. H. Pathan, I/C Additional City Engineer, Drainage Department, Surat Municipal Corporation, Gujarat addressing the participants.

On the second day, the session on 'Wastewater Processing System – Case of Surat Municipal Corporation (SMC)' was delivered by Mr. E. H. Pathan, I/C Additional City Engineer, Drainage Department, Surat Municipal Corporation, Gujarat. He started his session by giving emphasis on making cities AtmaNirbhar by utilizing treated wastewater for industrial purpose under Smart City Mission for uninterrupted water supply to industries. He explained that major textile cluster with more than 125 dyeing and printing houses - bulk water consumer having water demand of 110 MLD is situated in Surat city. He said that water supply to citizens of Surat city has been always a priority as compared to Pandesara GIDC industries. Hence, it is challenging for SMC to fulfill water demands in parallel considering the tremendous growth in area and increasing population. Therefore, SMC has started treating wastewater to fulfill the industrial demands. SMC built 40 MLD Tertiary Level Wastewater Treatment Plant at Bamroli with support from the State Government, which is in successful operation since 2014. He added that after success of first largest operational Bamroli Tertiary Treatment Plant, Pandesara Industries demanded additional tertiary treated wastewater as processed water for their industries and hence additional 40 MLD Tertiary Treatment Plant (TTP) has been taken up as replica under Smart City Mission at Dindoli. He emphasized that reuse and recycle of wastewater is a SMART step towards protection and conservation of water bodies and environment. He said that the initiative of reuse of treated wastewater contributes towards reducing the dependency on conventional resources of water, reduces diversion of drinking water for non-potable purposes and guarantees revenue generation for SMC. He also said that creation of alternative water resources, which is a basic need of industries to sustain and operate industries in a competitive market. These initiatives have given confidence to user-industries to operate their industries at desired output. Therefore, they have resulted in giving better livelihood to people associated with these industries. He mentioned the impact of initiatives undertaken in water management by stating that the initiative of reuse of treated wastewater reduces the burden on receiving water bodies, where in secondary level treated wastewater was planned to be discharged. Instead of discharging secondary level treated wastewater to the available water body and adding pollution load to that extent, has been avoided. He also added that instead of lifting the fresh water from the available resources, wastewater being treated up to the desired level to reuse the same instead of the natural water resource, thereby helps in conserving the environment. This initiative of treating wastewater assures availability of the potable water to the citizens by saving natural resources through supplying alternate water to the industries. He talked on the benefits of treating wastewater initiatives. The benefits are reduced diversion of drinking water for non-potable purposes in the long term and augments the current revenues of SMC from sale of water for industrial purposes. He concluded the session by emphasizing on sustainability of wastewater treatment, its replicability and scalability in cities.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Mr. Swapnil Desai
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Maleka Ansari
Maleka Ansari
RCUES Mumbai
Mamata Shetty
Raw Water
Micrometer (μm)
Macro Particle
Micro Particle
Macro Molecular
Molecular
Ionic
1000
100
10
1.0
0.1
0.01
0.001
0.0001
Coal Particles
Pollen
Hair
Sand
Yeast
Red Blood Cell
Bacteria
Atmospheric Dust
Asbestos
Viruses
Pyrogen Endotoxin
Sugar
Aqueous Salt
Metal Ions
Particle Filtration
Micro Filtration
Ultra Filtration
Nano Filtration
Reverse Osmosis
Purified Water

Illustration of Filtration Process v/s Impurity removal

Chart Source : The Royal Society of Chemistry, Based on AWWA 1990

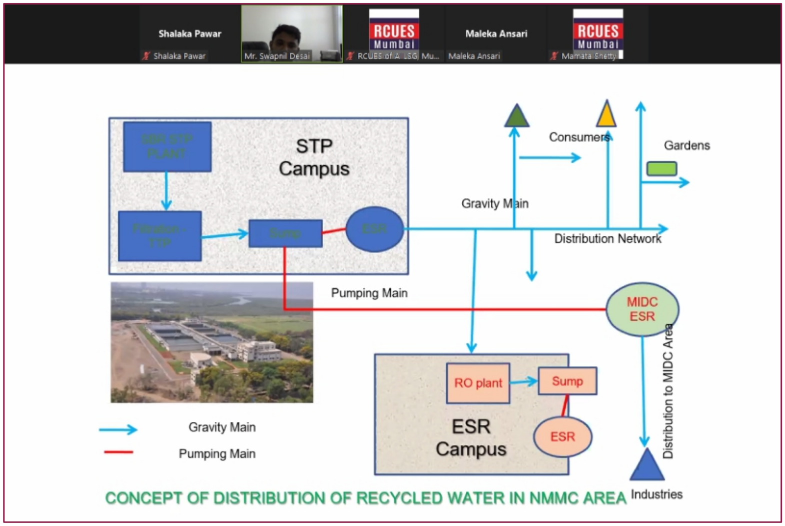
Mr. Swapnil Desai, Mechanical Engineer, Sewerage Department, NMMC, Navi Mumbai addressing the participants.

The next session on "Wastewater Processing System – Case of Navi Mumbai Municipal Corporation (NMMC)' was delivered by Mr. Swapnil Desai, Mechanical Engineer, Sewerage Department, NMMC, Navi Mumbai. He started his session by saying that as part of efforts towards water conservation and recycling and to free up potable water resources, NMMC has started several initiatives in treating wastewater. He explained that NMMC has decided to go for advanced technologies in the field of wastewater treatment. These advanced treatment technologies are the modifications made over the traditional treatment methods by making the change in process and/or by introducing or bringing the automation work. Such technology is named as (C-Tech). He added that this C-tech based advanced Sequential Batch Reactor (SBR) STP is an activated sludge treatment plant where sewage treated in batches instead of a continuous process, which is also working in time rather than space as their operations are controlled by Programmable Logic Controller (PLC) panel in which footprint area is less. He explained the objectives of treating wastewater by stating that it creates an alternative non potable water source, provides 100% sewerage network and sewage treatment facility in the city to make self-sustaining sewerage systems and also provides safe, hygienic, clean and green environment in NMMC. He talked on available infrastructure of sewerage treatment facilities at NMMC, its operations with available modern technologies. He then explained the good initiatives undertaken under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) mission. He elucidated that 40 MLD Tertiary Project (Dual media filter with UF and UV system) was undertaken to supply treated wastewater of desired quality with state of art facility from STPs to various Industrial Estates for non-domestic purposes. Moreover, 5 MLD Tertiary Treatment Project with FDF and UV disinfection system was undertaken and treated water was used for greenbelt developed between road and 31 gardens at NMMC. He added that almost 30% of treated water was given to city gardens, washing of solid-waste vehicles, compactors, city transport buses, sprinklers, road dividers to reduce the burden of demand of fresh water. He concluded his session by highlighting that other ULBs should also replicate these initiatives of wastewater treatment in their cities.

SUMMING UP

This web-based training programme was concluded by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai by proposing a Vote of Thanks to the distinguished subject trainers and the participants after the feedback session.

GLIMPSES OF THE WEB-BASED TRAINING PROGRAMME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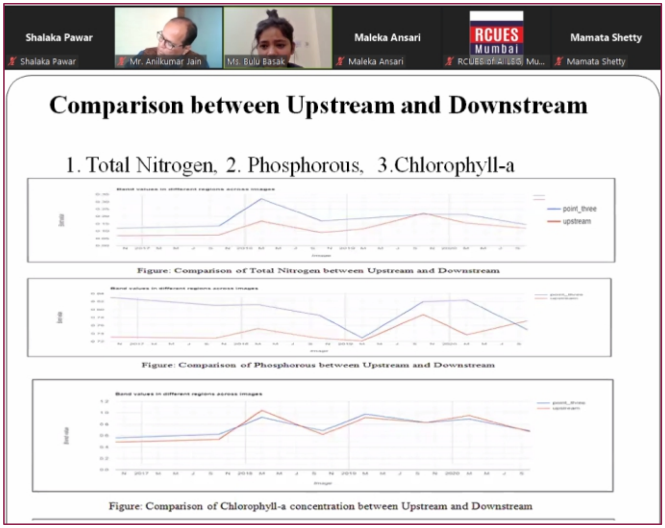
Maleka Ansari
Mamata Shetty
SBR STP PLANT
Filtration - TTP
Sump
ESR
STP Campus
Gravity Main
Consumers
Gardens
Distribution Network
Pumping Main
MIDC ESR
Distribution to MIDC Area
RO plant
Sump
ESR
ESR Campus
Industries
Gravity Main
Pumping Main

CONCEPT OF DISTRIBUTION OF RECYCLED WATER IN NMMC AREA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Mr. Anilkumar Jain
Ms. Bulu Basak
Maleka Ansari
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Mamata Shetty
Band values in different regions across images
point_three
upstream

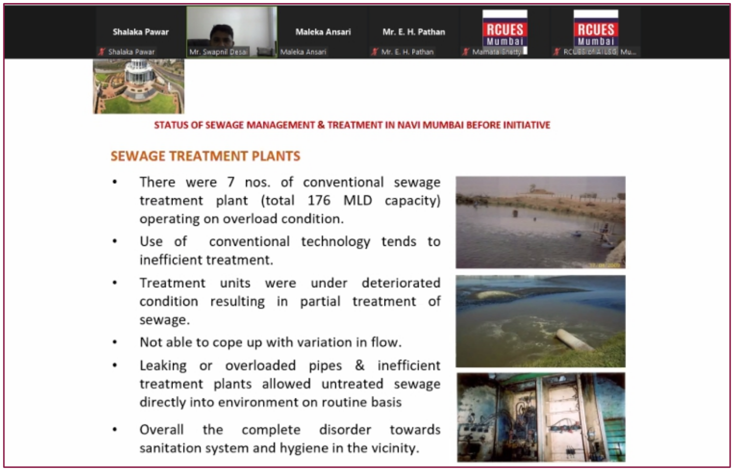
Comparison between Upstream and Downstream

1. Total Nitrogen, 2. Phosphorous, 3.Chlorophyll-a

Figure: Comparison of Total Nitrogen between Upstream and Downstream

Figure: Comparison of Phosphorous between Upstream and Downstream

Figure: Comparison of Chlorophyll-a concentration between Upstream and Downstream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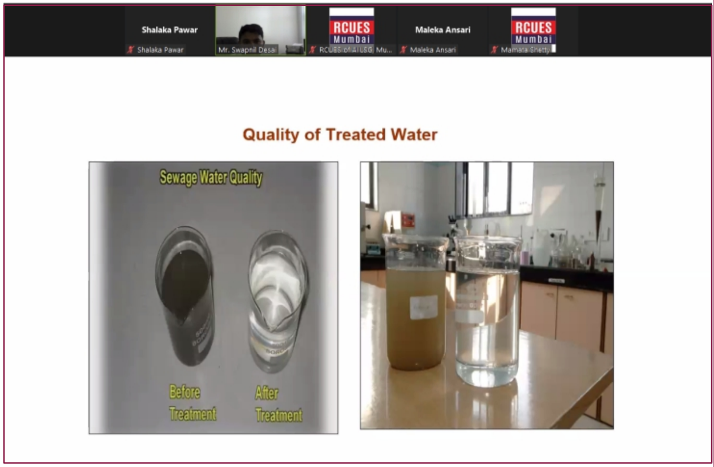
Mr. Swapnil Desai
Maleka Ansari
Mr. E. H. Pathan
RCUES Mumbai
Mamata Shetty
RCUES of AIILSG Mu...

STATUS OF SEWAGE MANAGEMENT & TREATMENT IN NAVI MUMBAI BEFORE INITIATIVE

SEWAGE TREATMENT PLANTS

- There were 7 nos. of conventional sewage treatment plant (total 176 MLD capacity) operating on overload condition.
- Use of conventional technology tends to inefficient treatment.
- Treatment units were under deteriorated condition resulting in partial treatment of sewage.
- Not able to cope up with variation in flow.
- Leaking or overloaded pipes & inefficient treatment plants allowed untreated sewage directly into environment on routine basis
- Overall the complete disorder towards sanitation system and hygiene in the vicinity.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Mamata Shetty
Sewage Water Quality
Before Treatment
After Treatment

Quality of Treated Water

Section

03

Regional Specialized Web-Based Training Programme on

Emergency Preparedness and Response System at Local Level

17th - 18th February, 2022

Key Highlights

The key highlights of this web-based training programme were that the participants learnt how to tackle emergencies and gained the knowledge on how ULBs' role is significant in developing strategic framework.

BACKGROUND

In today's world at, frequent, natural and human-involved disasters and crucial events pose serious threats to human society and call for the smart response system for city emergencies to improve its emergency preparedness and response. This needs to investigate the challenges of the emergency response system, including the inefficiency of prediction of emergencies, uncoordinated preparedness for emergencies, lack of communication and collaboration across different departments as well as unpreparedness of secondary challenges in healthcare, environmental protection, and human progress.

The status of the smart response system for city emergencies is based on the framework of a closed feedback control loop, data acquisition, communication, decision-making, and action. Emergency preparedness is a continuous process in which action, funding, partnerships and political commitment at all levels must be sustained. It relies on all stakeholders working together effectively to plan, invest in and implement. It is an imperative need to develop strategic framework by Urban Local Bodies (ULBs) to strengthen cities emergency preparedness in order to ensure a timely, efficient and effective response to events including outbreaks of infectious diseases that have significant impact of human health and society.

Considering this background, the Regional Centre for Urban & Environmental Studies (RCUES) of All India Institute of Local Self Government (AIILSG), Mumbai conducted a **Regional Specialized Web-Based Training Programme on 'Emergency Preparedness and Response System at Local Level' on 17th - 18th February 2022. This training programme was supported by the Ministry of Housing & Urban Affairs (MoHUA), Government of India (GoI).**

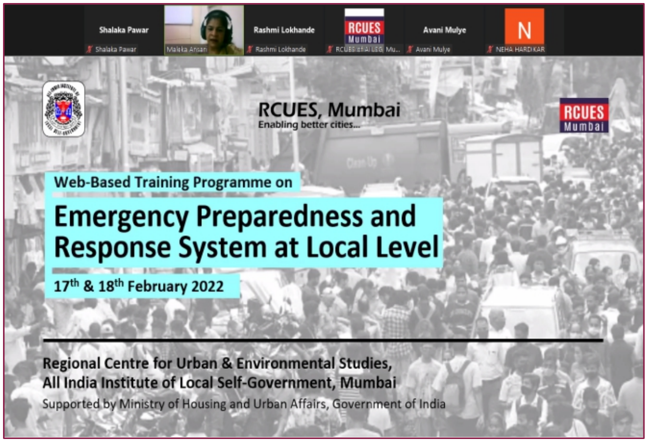
KEY OBJECTIVE

The key objective of this web-based training programme was to encourage ULBs to develop strategic framework for emergency preparedness at city level.

PARTICIPATION

In all, 31 participants comprising Chief Officers, STP Plant In-Charge, Municipal Engineers, Sanitary Inspectors, Community Organizers from the states of Maharashtra, Rajasthan, Goa and Gujarat attended this web-based training programme.

INTRODUCTION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Avani Mulye
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RCUES Mumbai

RCUES, Mumbai
Enabling better cities...

Web-Based Training Programme on

Emergency Preparedness and Response System at Local Level

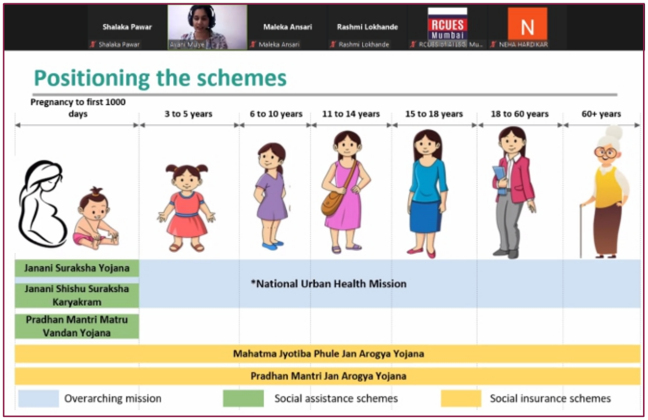
17th & 18th February 2022

Regional Centre for Urban & Environmental Studies,
All India Institute of Local Self-Government, Mumbai
Supported by Ministry of Housing and Urban Affairs, Government of India

Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai addressing the participants.

This web-based training programme was started by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai. She welcomed the distinguished subject experts and the participants and explained the objective of the training programme. She said that ULBs need to develop strategic framework to strengthen cities emergency preparedness in order to ensure a timely, efficient response to any emergencies. The absence of strategic framework emerged the challenges in this system. She encouraged the participants to learn about ULBs role in emergency preparedness through the technical sessions by the subject experts. She requested the trainers to start the technical sessions.

TECHNICAL SESSIONS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NEHA HARDIKAR
Pregnancy to first 1000 days
3 to 5 years
6 to 10 years
11 to 14 years
15 to 18 years
18 to 60 years
60+ years

Positioning the schemes

Janani Suraksha Yojana
Janani Shishu Suraksha Karyakram
Pradhan Mantri Matru Vandan Yojana
*National Urban Health Mission
Mahatma Jyotiba Phule Jan Arogya Yojana
Pradhan Mantri Jan Arogya Yojana

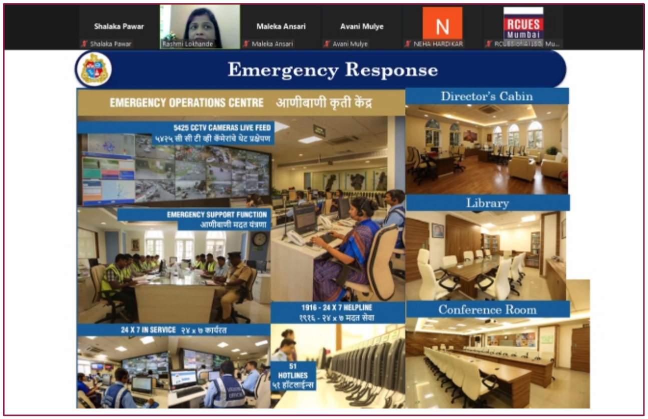
Overarching mission
Social assistance schemes
Social insurance schemes

Ms. Avani Mulye, Research Associate, AIILSG, Mumbai addressing the participants.

The first technical session on 'Emergency Preparedness through Health Schemes' was delivered by Ms. Avani Mulye, Research Associate, AIILSG, Mumbai. She started her session by emphasizing on emergency preparedness through health schemes and said that all health programmes are implemented through policies. She explained about National Health Policy 2017, which envisages its goal to achieve the highest level of health and wellbeing for all at all ages, through preventive measures, promote health care orientation in all developmental policies, and ensure universal access to good quality health care services. She added that this policy advocates that emergency preparedness requires a dispersed and effective management, community members to be trained as first responder, regular strengthening of their capacities, development of mass casualty management protocols for Community Health Centres (CHC), higher facilities and developing unified emergency response system which is linked to a dedicated universal access number. She later explained public health schemes and said that the National Urban Health

Mission's (NUHM) focus was on strengthening primary health care delivery system and providing equitable and quality health care services to the urban population with focus on slum dwellers and vulnerable population. She talked on Ayushman Bharat, the national initiative as the part of National Health Policy 2017. It adopts a continuum of care approach through insurance and infrastructure facilities. She further talked on health schemes which are being implemented at all age groups by explaining overarching mission, social assistance schemes and social insurance schemes. She explained the objectives and key areas of Janani Suraksha Yojana (JSY), Janani Shishu Suraksha Karyakram (JSSK), Pradhan Mantri Matru Vandana Yojana (PMMVY). Besides, these health schemes, she talked on Pradhan Mantri Jan Arogya Yojana (PMJAY), one of the largest health insurance schemes which focuses to improve access to quality healthcare at affordable prices and expand coverage of the scheme and strengthen the health insurance ecosystem. She further spoke on Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY) which provides completely cashless, secondary and tertiary healthcare with insurance cover. She concluded her session by claiming that though health schemes are implemented well, these schemes have to be strengthened during unforeseen emergencies in health sector by developing infrastructure facilities.

The next session on 'Role of States and ULBs in Preparedness and Response System' was delivered by Ms. Rashmi Lokhande, Chief Officer, Disaster Management Department, Municipal Corporation of Greater Mumbai (MCGM), Mumbai. She started her session by focusing on vulnerabilities occurred due to increase in density of urban population, unplanned development, inadequate regulatory and enforcement mechanism and effects of Climate Change. She talked on paradigm shift from response and relief centric approach to pro-active prevention, mitigation and preparedness driven approach which lays down institutional and coordination mechanism for effective Disaster Management at National, State, District and Local level. She briefly explained national and state level organizational hierarchy profile and focused on explaining potential hazards to Mumbai. She added that physical characteristics of Mumbai city, huge population and multiple vulnerabilities are key factors in evolving potential hazards in the city. She further spoke on non-structural measures for disaster risk reduction by starting functioning of Emergency Operation Centre (EOC). She added that, this EOC has been established at Disaster Management Department of MCGM, Mumbai, which is running 24X7 and is equipped with the latest communication and early warning systems. The control room contains 52 hot lines connected with various stakeholders, Very High Frequency (VHF) network and Ward Control Room and are operational round the clock, 24X7 with dedicated manpower. She emphasized on importance of coordination meetings with several stakeholders like police, fire brigade, civic authorities, NGOs etc. for effective functioning of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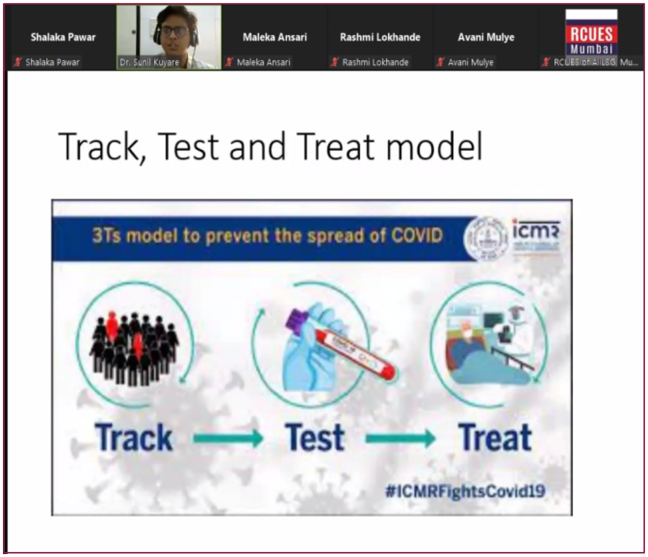
RCUES Mumbai
Emergency Response
EMERGENCY OPERATIONS CENTRE आणीबाणी कृती केंद्र
5425 CCTV CAMERAS LIVE FEED
५४२५ सी सी टी व्ही कॅमेरांचे थेट प्रक्षेपण
EMERGENCY SUPPORT FUNCTION
आणीबाणी मदत यंत्रणा
1916 - 24 X 7 HELPLINE
१९१६ - २४ x ७ मदत सेवा
24 X 7 IN SERVICE २४ x ७ कार्यरत
51 HOTLINES ५१ हॉटलाईन्स
Director's Cabin
Library
Conference Room

Ms. Rashmi Lokhande, Chief Officer, Disaster Management Department, Municipal Corporation of Greater Mumbai (MCGM), Mumbai addressing the participants.

EOCs. She explained the Emergency Support Functions (ESFs), in which transport is a crucial part. She also spoke about Disaster Recovery Site at Parel which is a replica of the main EOC situated at MCGM, Fort, Mumbai. She further explained the Information Technology (IT) in Disaster Management, giving emphasis on automatic weather stations for early warning. In all 60 automatic weather stations have been installed throughout Mumbai to get real time weather parameters and rainfall data is also transmitted after every 15 minutes. Furthermore, the data is checked, analyzed and the warnings are issued accordingly. She also explained about flow level sensors which are installed to monitor the flood level in rivers and lakes. It gives real time data at EOC. The installation of sensors helps to initiate early evacuation in low lying areas. She concluded her session by saying that IT enabled system is very effective in disaster management. The information related to disasters can be disseminated through Face Book, Twitter and other social platforms to undertake effective preventive measures. She concluded by mentioning that trainings are imparted to municipal officials and NGOs, awareness campaigns are organised for community citizens to create awareness on developing emergency preparedness and tackling emergencies at city level.

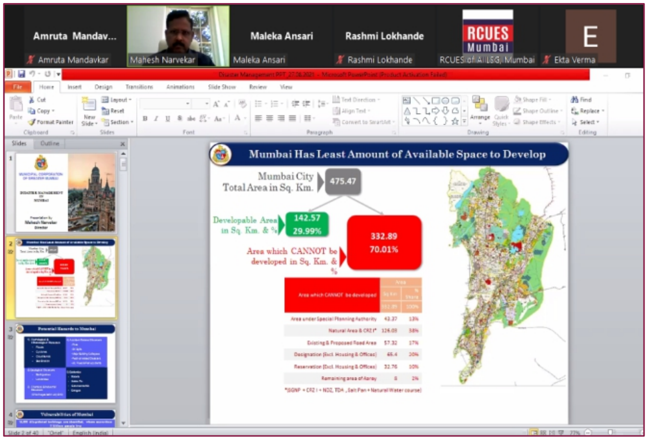
The next session on 'Emergency Preparedness and Response System in Health Care' was delivered by Dr. Sunil Kuyare, Lab Director, Apporva Diagnostic & Healthcare, Mira Road, Thane. He started his session by focusing on development of health care infrastructure, financial provision for relief activities and provision of sustainable health care services. He explained that the emergency preparedness and response system needs to be strengthened ensuring access to health care during emergencies. He then explained the occurance of health emergencies during COVID-19 and required preparedness at manifold levels by citing examples of health emergencies in hospitals and health care centres. He added that increasing provisions of multiple resources and additonal equipments in the health care system are required to develop a plan of action for emergency preparedness. He also gave emaphasis on non financial resources like COVID warriors, awards, certificates and Maharashtra Medical Council (MMC) credit points etc. He said that for sustainable health care services, it is required to prepare a Standard Operating Procedures (SOPs), learning from previous crisis situations and strengthening the present health care system. He concluded his session by stating that training in SOP preparation, developing PCR labs and microbiologist, rising resources, reserving funds for emergencies and increasing GDP for health sector are significant components in sustaining health care services during emergencies at city level.



Track, Test and Treat model

3Ts model to prevent the spread of COVID

Dr. Sunil Kuyare, Lab Director, Apporva Diagnostic & Healthcare, Mira Road, Thane addressing the participants.



Mumbai Has Least Amount of Available Space to Develop

Mumbai City Total Area in Sq. Km. 475.47

Developable Area in Sq. Km. & % 142.57 29.99%

Area which CANNOT be developed in Sq. Km. & % 332.89 70.01%

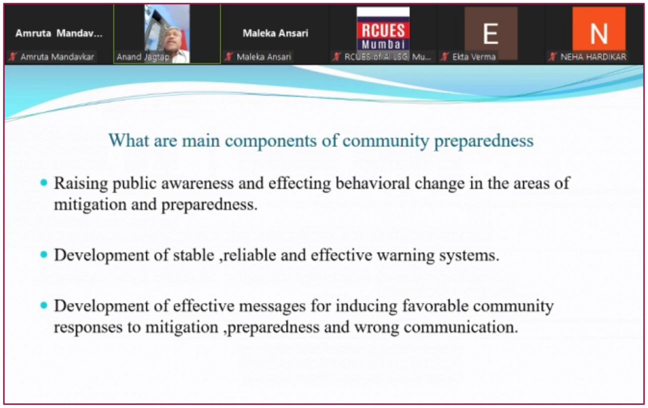
Area which CANNOT be developed	Area	
	Sq Km	% Share
	332.89	100%
Area under Special Planning Authority	43.27	13%
Natural Area & CRZ I*	126.03	38%
Existing & Proposed Road Area	57.32	17%
Designation (Excl. Housing & Offices)	65.4	20%
Reservation (Excl. Housing & Offices)	32.76	10%
Remaining area of Aarey	8	2%

*(SGNP + CRZ I + NDZ, TDA , Salt Pan + Natural Water course)

Mr. Mahesh Narvekar, Director, Disaster Management Department, MCGM, Mumbai addressing the participants.

On the second day, the session on 'Emergency Preparedness and Response System Overview' was delivered by Mr. Mahesh Narvekar, Director, Disaster Management Department, MCGM, Mumbai. He started his session by saying that Mumbai being a coastal city is vulnerable to various hazards, including flooding. He further stated that according to a UN Report, more than 50% people in the world live in cities. Mumbai is not originally a planned city and because of its peculiar features, the city does not have the desired resilience to face the disasters better. He then explained that natural disasters across the country cannot be avoided but during disasters, loss of life and damage to property and social assets can be minimized through proper planning, emergency preparedness and mitigation. He further explained that disaster risks can be reduced through systematic efforts by analyzing and managing the causative factors of disasters, including exposure to hazards, through reducing vulnerability of people and property, judicious management of land and the environment, and improved preparedness for adverse events. He further spoke about institutional development required in disaster management.

The Disaster Management Act 2005, provides for the legal and institutional framework for disaster management in India at the National, State and District level. He later spoke on significance of emergency preparedness at community level. As communities are vlunerable and prone to potential disasters, ULBs have to play a defined role in making plan of action to tackle emergencies such as flooding, unforseen pandemic etc. He concluded his session by quoting examples of emeregencies occured and the efforts taken at local and community level by deploying plan of preparedness to address these emergencies during COVID times.

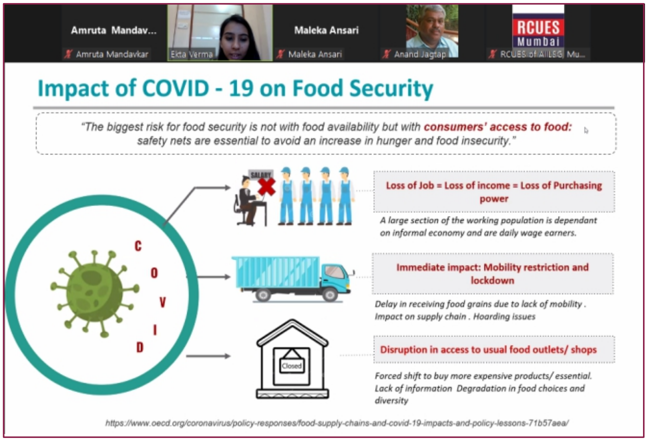


What are main components of community preparedness

- Raising public awareness and effecting behavioral change in the areas of mitigation and preparedness.
- Development of stable ,reliable and effective warning systems.
- Development of effective messages for inducing favorable community responses to mitigation ,preparedness and wrong communication.

Mr. Anand Jagtap, former Officer on Special Duty (OSD), MCGM, Mumbai addressing the participants.

The next session on 'Awareness and Preparedness of Emergencies at Community Level' was delivered by Mr. Anand Jagtap, former Officer on Special Duty (OSD), MCGM, Mumbai. He started his session by focusing on emergency preparedness in communities. The emergency preparedness helps communities response to the consequences of an adverse occurrence by having plans in place so that people know what to do and where to go in case of emergencies. He said that community preparedness is a continuous process which includes emergency planning, volunteers training, exercise assessment and remedial actions. He said that community preparedness can be deployed through increasing public awareness and effecting behavioural change in the areas of mitigation and preparedness. Development of stable, reliable and effective warning systems and effective messages for inducing favourable community responses during emergencies. He added that community-based disaster preparedness is a systematic way towards achieving a safe and resilient community. This process binds the group cohesively in the process of making decisions and deals with conflicts, resolves issues, through addressing emergency hazards. He further talked on disaster phases and importance of community-based disaster preparedness, in which the community understands physical, social and economic risks and addresses these risks at community level. He added that communities have to be encouraged to adopt disaster risk reduction by themselves as challenges will be addressed through correct interventions at community level. He concluded the session by giving the examples of emergencies during COVID times and how communities addressed these challenges through several stakeholders' support.



Impact of COVID - 19 on Food Security

"The biggest risk for food security is not with food availability but with **consumers' access to food:** safety nets are essential to avoid an increase in hunger and food insecurity."

Loss of Job = Loss of income = Loss of Purchasing power

A large section of the working population is dependant on informal economy and are daily wage earners.

Immediate impact: Mobility restriction and lockdown

Delay in receiving food grains due to lack of mobility . Impact on supply chain . Hoarding issues

Disruption in access to usual food outlets/ shops

Forced shift to buy more expensive products/ essential. Lack of information Degradation in food choices and diversity

https://www.oecd.org/coronavirus/policy-responses/food-supply-chains-and-covid-19-impacts-and-policy-lessons-71b57aea/

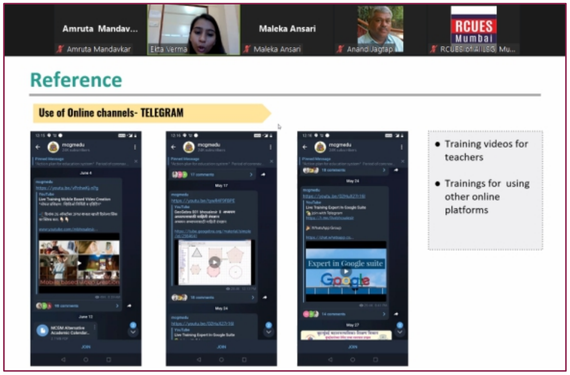
Ms. Ekta Verma, Research Associate, AIILSG, Mumbai addressing the participants.

The last session on 'Good Initiatives in Social Sector for Emergency Response' was delivered by Ms. Ekta Verma, Research Associate, AIILSG, Mumbai. She started her session by focusing on pandemic as an emergency and its impact on vulnerables. She said that social sector comprises policies and programmes designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income. She explained social sectors constituents and schemes under each sector. While explaining food sector, she talked on impact of COVID-19 on food security. Safety nets are essential to avoid an increase in hunger and food insecurity as an emergency preparedness. Further delays happened in receiving food grains due to lack of mobility. This situation compels urban poor to buy more expensive products. She further said how emergency response was taken in ensuring food security at local level through data management, targeting right size, coordination with NGOs, CSR, Corporate houses, ward officers and facilitation by providing vendors to make the services available. She also talked on ensuring food security at local level during COVID times. She talked on partnerships in food provision during COVID-19 by explaining case of Mumbai's food distribution programme and 'Milkar' initiative. She highlighted upon how multiple stakeholders were effectively working as a joint venture by playing their individual role splendidly in ensuring food provision during COVID times. She elucidated upon food distribution modality partnering with other stakeholders and their roles in the process. She then talked on impact of COVID-19 on education sector. She said that majority of students were studying government/ municipal schools and were not able to attend online classes due to varied reasons, including migration and lack of access to devices. The Education Department of MCGM initiated online training of teachers since April 2020 through various platforms such as Zoom, Google Meet, YouTube etc. She also explained noteworthy efforts undertaken by organizations such as PRATHAM Foundation, American India Foundation, Citizen Association for Child Rights (CACR), UDAAN India Foundation and Rotary Club of Bombay Harbour through their CSR funds. She talked on the initiatives undertaken to improve maternal health and explained delivery modality by partnering with other stakeholders. The organizations such as NGOs, CSR Funding Agencies and Elected Representatives were involved in outreach and facilitated essential services in coordination with health post, ward officers in case of any COVID or non-COVID emergencies. She concluded her session by saying that partnering stakeholders plays a pivotal role in streamlining emergency response in social sector.

SUMMING UP

This web-based training programme was concluded by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai by proposing a Vote of Thanks to the distinguished trainers and the participants after the feedback session.

GLIMPSES OF THE WEB-BASED TRAINING PROGRAMME


Amruta Mandav...
Amruta Mandavkar
Ekta Verma
Maleka Ansari
Maleka Ansari
Anand Jagtap
RCUES Mumbai
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Expert in Google suite
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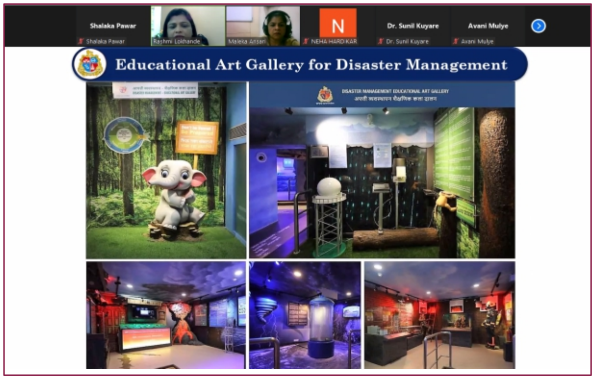
Reference

Use of Online channels- TELEGRAM

- Training videos for teachers
- Trainings for using other online platforms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Dr. Sunil Kuyare
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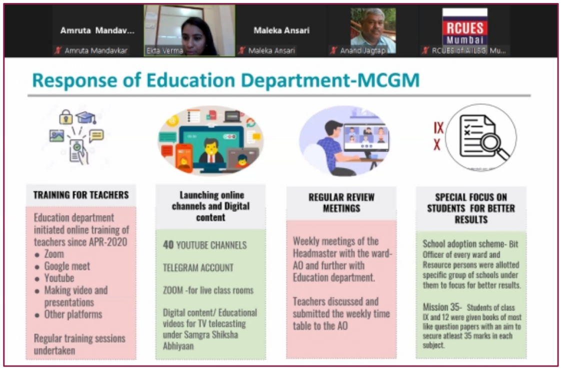
Avani Mulye
Avani Mulye
DISASTER MANAGEMENT EDUCATIONAL ART GALLERY
आपत्ती व्यवस्थापन शैक्षणिक कला दालन

Educational Art Gallery for Disaster Management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Anand Jagtap
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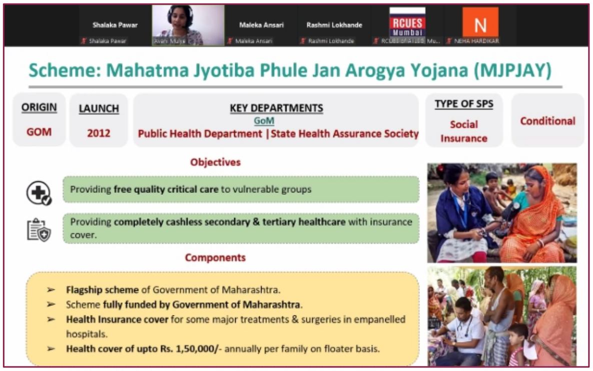
IX
X

Response of Education Department-MCGM

TRAINING FOR TEACHERS	Launching online channels and Digital content	REGULAR REVIEW MEETINGS	SPECIAL FOCUS ON STUDENTS FOR BETTER RESULTS
Education department initiated online training of teachers since APR-2020 • Zoom • Google meet • Youtube • Making video and presentations • Other platforms Regular training sessions undertaken	40 YOUTUBE CHANNELS TELEGRAM ACCOUNT ZOOM -for live class rooms Digital content/ Educational videos for TV telecasting under Samgra Shiksha Abhiyaan	Weekly meetings of the Headmaster with the ward-AO and further with Education department. Teachers discussed and submitted the weekly time table to the AO	School adoption scheme- Bit Officer of every ward and Resource persons were allotted specific group of schools under them to focus for better results. Mission 35- Students of class IX and 12 were given books of most like question papers with an aim to secure atleast 35 marks in each subject.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Avani Mulye
Maleka Ansari
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Rashmi Lokhande
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RCUES Mumbai
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NEHA HARDIKAR

Scheme: Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY)

ORIGIN	LAUNCH	KEY DEPARTMENTS	TYPE OF SPS	
GOM	2012	GoM Public Health Department | State Health Assurance Society	Social Insurance	Conditional

Objectives

- Providing **free quality critical care** to vulnerable groups
- Providing **completely cashless secondary & tertiary healthcare** with insurance cover.

Components

- ➢ **Flagship scheme** of Government of Maharashtra.
- ➢ Scheme **fully funded by Government of Maharashtra**.
- ➢ **Health Insurance cover** for some major treatments & surgeries in empanelled hospitals.
- ➢ **Health cover of upto Rs. 1,50,000/-** annually per family on floater basis.

Section

04

Regional Specialized Training Programme on

Exploring Urban Rural Linkages for Waste Management

24th - 25th February, 2022, Udaipur, Rajasthan

Key Highlight

The key highlight of this specialized training programme was that the participants learnt how to establish linkages between urban and rural local bodies in waste management and develop sustainable work opportunities.

BACKGROUND

Urbanization and concomitant challenges pose a great threat to sustainable development. Urban and rural development interacts through the flows of people, materials, energy, goods, capital, and information. Without building sound urban-rural linkages, achieving development in one area could compromise it in another area. Achieving sustainable development needs customized policy prioritization and implementation in both urban and rural areas. Urban-Rural Linkages touch on urban and territorial planning, strengthening small and intermediate towns, from enabling spatial flows of people, products, services, reducing the environmental impact in urban-rural convergences, developing legislation and governance structures and promoting inclusive financial investments among others.

While the world is rapidly urbanizing, the development gap between rural and urban areas tends to increase. Urbanization has been widely acknowledged for its transformative power, but even though urban and rural areas depend on each other, rural areas often lag behind and worldwide, 85 percent of the poor still live in rural areas. In both the 2030 Agenda for Sustainable Development (SDGs) and the New Urban Agenda (NUA), it has been agreed to frame policies that support integrated urban and territorial planning and development. They call for new, inclusive approaches and enhanced synergies between urban and rural communities and spaces.

Considering this background, the Regional Centre for Urban & Environmental Studies (RCUES) of All India Institute of Local Self Government (AIILSG), Mumbai conducted a **Regional Specialized Training Programme on 'Exploring Urban Rural Linkages in Waste Management' on 24th - 25th February 2022 at Udaipur, Rajasthan. This training programme was supported by the Ministry of Housing & Urban Affairs (MoHUA), Government of India (GoI).**

KEY OBJECTIVE

The key objective of this Regional Specialized Training Programme was to encourage local bodies from rural areas to establish linkages with ULBs for effective implementation of waste management system.

PARTICIPATION

In all, 27 participants comprising Dy. Mayors, Presidents, Elected Representatives from the states of Tripura and Rajasthan attended this training programme.

INTRODUCTION & INAUGURATION

Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai addressing the participants.

This training programme was commenced by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai. She welcomed the subject trainers and the participants and explained the objective of the training programme by saying that though urbanization increases immensely, in India 70% of the population still lives in rural areas. Therefore, inclusive approach is required for enhancing synergies between urban and rural areas. This synergy may also increase livelihood opportunities under the National Urban Livelihood Mission (NULM) in waste management sector. She told the participants that their knowledge on livelihood opportunities also will be updated to give a good insight for adopting inclusive approach while exploring urban rural linkages in waste management. She then requested Hon'ble Mayor of Udaipur, Rajasthan to inaugurate the training programme.

Mr. Govind Singh Tank, Hon'ble Mayor of Udaipur Municipal Corporation (UMC), Rajasthan addressing the participants.

This specialized training programme was inaugurated by Mr. Govind Singh Tank, Hon'ble Mayor of Udaipur Municipal Corporation (UMC), Rajasthan by lighting the traditional lamp of knowledge, in the presence of Mr. Paras Singhavi, Dy. Mayor of UMC, Ms. Rekha Utwal, Chairman, Women & Child Welfare Committee and NULM Committee, UMC, Rajasthan. In his inaugural address, he welcomed distinguished faculty and the participants. He talked on waste management implementation in rural areas and how it is needed to link with urban services. He further said that in some parts of the rural areas, plastic waste is converted into granules through recycling process. He added that these granules can be used for road construction. Thus, Urban Local Bodies (ULBs) have to procure these granules from rural areas to develop its linkages. These linkages will also develop livelihood opportunities. He concluded his inaugural address by wishing success to this specialized training programme.

TECHNICAL SESSIONS

SBM –U 2.0
CLEAN
The Government of India in partnership with States/ UTs and ULBs is committed to make all cities 'Garbage Free' and 'Water Secure' in order to contribute to the achievement of the Sustainable Development Goals (SDG 6) 2030.
Ensuring 100% scientific Solid Waste Management (SWM).

Mr. Girish Bhardwaj, former Health & Hygiene Officer, Department of Education, Government of Rajasthan addressing the participants.

The first technical session on 'Overview of Urban-Rural Linkages in Waste Management' was delivered by Mr. Girish Bhardwaj, former Health & Hygiene Officer, Department of Education, Government of Rajasthan. He started his session by focusing on significance of urban rural linkages in achieving sustainable development. He said that urbanization and associated challenges pose a prodigious threat to sustainable development. Urban and rural communities do not live in isolation from one another. The flow of people, goods, services and transport, for example, does not go in one direction only. He added that there is a repeated and reciprocal circular movement across the urban-rural continuum that connects these areas and generates a synergy that contributes to functional, integrated territories and regions. He talked about Sustainable Development Goal (SDG) - 11, in connection with the urban-rural linkages. He explained that the benefits of investing in connective infrastructure and services, while building capacity for inclusive and functional territories linking urban and rural communities, are immense in economic, social and environmental areas of sustainable development. He concluded his session by saying that urban-rural linkages should have functional and spatial systems-based approaches and which should be financially inclusive and environmentally sensitive for sustainable development.

Dr. Shail Singh Solanki, District Project Officer, UMC, Rajasthan addressing the participants.

The nest session on 'Overview of National Urban Livelihood Mission (NULM)' was delivered by Dr. Shail Singh Solanki, District Project Officer, UMC, Rajasthan. He emphasized on how livelihood opportunities can be generated through urban-rural linkages in waste management. He explained the process of enabling urban poor to access gainful self-employment and skilled wage employment opportunities, resulting in a substantial improvement in their livelihoods on a sustainable basis, through building strong grassroots level institutions of the poor under NULM mission. He added that social mobilization is stronger in rural India and in a few States of South India. The challenge of Self-Help Group (SHG) mobilization remains in urban India. The synergy between urban-rural linkages will address these challenges of social mobilization. He gave example of urban-rural linkages through SHGs in Rajasthan State by saying that Gramin Ajivika Vikas Parishad, Rajasthan, with support from UMC, Rajasthan formed SHGs of vulnerable groups for their sustainable livelihood. The MoU was executed between UMC, Rajasthan and City Level Federation (CLF), Udaipur, Rajasthan for working SHGs in waste management at Udaipur gardens and successfully established urban-rural linkages through livelihood opportunities in waste management. He concluded his session by saying that social mobilization and institutional development are significant components of NULM to generate work opportunities through SHGs by synergizing urban and rural communities.

SITE VISITS

On the first day afternoon, three site visits were organized. The details of the site visits are given below :

The first site visit was organized at City Livelihood Centre (CLC), Chetak Circle, Udaipur, Rajasthan. Mr. Bhanu Pratap Devada, District Project Manager, NULM, UMC, Rajasthan explained how CLCs were established in Udaipur with the support of UMC. He added that CLCs generate platform for the urban poors' products and services and to provide business support to them by building grassroot institutions. SHGs are engaged in crafting products and developing a market for sale with UMC's support. This helped members of SHGs to generate livelihood opportunities on sustainable basis. He also explained that SHGs are immensely active in running CLCs self-reliantly. The CLC also provides subsidized food facility for homeless population. The food is prepared by SHGs for achieving sustainable livelihood. The participants observed the craft items made by SHGs and displayed in the Centre for sale. The participants were glad to visit CLC in Udaipur.

The next visit was organized at Transfer Station called Kumbharoka Bhatta, Udaipur. The participants observed the automated system in weighing the waste, its segregation and transportation at different levels. The FINISH Society, Udaipur provided support to UMC in waste management to promote sustainable and equitable development in the city.

Participants during the site visit at City Livelihood Centre (CLC), Chetak Circle, Udaipur, Rajasthan.

Participants during the site visit at Transfer Station, Kumbharoka Bhatta, Udaipur, Rajasthan.

The last visit was organized at Waste to Energy Plant at Balicha, Udaipur. The participants observed waste to energy plant effectively run by SHG. A member of SHG explained the entire process of converting wet waste into energy. This plant was originally developed by UMC and gradually handed over to SHG for sustainable implementation of waste management in the city.

Participants during the site visit at Waste to Energy Plant at Balicha, Udaipur, Rajasthan.

On the second day, the session on 'Importance of Urban – Rural Linkages in Achieving Sustainable Development Goal' was delivered by Mr. Saurabh Agnihotri, Chief of Operations, Finish Society, Udaipur. He commenced his session by focusing on differences in waste management system. In urban areas, automated vehicles are used for waste collection in segregated manner. Besides well- equipped sorting centres and transfer stations, machine driven facility for waste processing are available at ULB level. Besides, high energy centric / budget centric approaches and team of engineers, consultants, and IT and Environment Experts are also deployed in urban areas.

Regional Centre for Urban & Environmental Studies
All India Institute of Local Self Government, Mumbai
Regional Specialized Training Programme on
Exploring Urban Rural Linkages for Waste Manage
24th & 25th February, 2022
Udaipur, Rajasthan
Supported by
Ministry of Housing and Urban Affairs

Mr. Saurabh Agnihotri, Chief of Operations, Finish Society, Udaipur, Rajasthan addressing the participants.

He then explained the scenario of rural sector by saying that in rural areas, waste collection should be planned on the basis of available financial resources by municipal councils. The over expenditure is avoided through limited frequency and type of collection. The municipal councils which come under rural areas generally prefer to collect dry waste to avoid the extra expenditure in processing waste and encouraged waste generators to process the wet waste through cluster composter at household or community level. He highlighted that urban-rural linkages are effective and viable option to process the waste in waste management. He concluded his session by explaining the benefits of urban-rural linkages in waste management.

The next session on 'Status of Tripura Urban Livelihoods Mission' was delivered by Mr. Pritam Deb, State Mission Manager, ME/Finance, Tripura. He commenced his session by focusing on SHGs and their empowerment through sustainable livelihood programmes. He explained the implementation status of NULM in Tripura state. He said that SHGs formed in rural areas are vulnerable and look for sustainable livelihood to at least ensure food security for them and their families.

He also said that urban rural linkages are certainly a good opportunity to obtain livelihood opportunities in waste management. He concluded his session by saying that Tripura Government is taking efforts in empowering SHGs. The women of SHGs were already engaged in paver making, fish farming and Mushroom activity etc. The urban rural linkages can be established by supporting SHGs through micro- enterprises.

Mr. Pritam Deb, State Mission Manager, ME/Finance, Tripura addressing the participants.

GROUP EXCERCISE

Participants doing group exercise during the programme at Udaipur, Rajasthan.

The Group Exercise was organized on Urban-Rural Linkages in Implementing Sustainable Waste Management Projects. The participants were divided into 3 groups and asked to develop action plan for implementing projects under waste management. Each group discussed amongst themselves and developed action plan. Later, each group presented their action plan. The first group gave emphasis on Information, Education and Communication (IEC) component for effective implementation of waste management projects. The awareness campaigns can be deployed through IEC activities in segregation of waste and further processing. The second group focused on stakeholders' participation as a significant component. They have shown the pivotal role of stakeholders in value chain of waste management. The third group highlighted the significance of Public Private Partnership (PPP) in waste management. This group tried to showcase urban rural linkages can be established through PPP in waste management.

SUMMING UP

The specialized training programme was concluded by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai by distributing certificates to the participants and proposing a Vote of Thanks.

GLIMPSES OF THE WEB-BASED TRAINING PROGRAMME

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