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

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P

BEHAVIOR CHANGE AND ADVOCACY: Understand behavioral aspects, its determinants and develop analytical skills for understanding WASH.

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Eligibility



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Contact details

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President, AllLSG, India **Mr. Ranjit Chavan**

Director General, AIILSG, & Editor in-Chief **Mr. Rajiv Agarwal, IAS (Retd.)**

Director, RCUES, AIILSG, & Editor **Ms. Utkarsha Kavadi**

Regional Specialized Web-Based Training Programme on **'Health and Safety of Front-line Workers / Sanitation Workers During and Post COVID-19'**

6th , 13th , 20th and 27th February 2021

The key highlight of the series of these web-based training programmes was that the SWM workers gained knowledge relating to their welfare activities including health, safety and significant facets of living a happy life.

Background

The outbreak of coronavirus has put the world in a grave public health crisis. Health and safety of individuals will now remain one of the top priories. The ongoing COVID-19 pandemic and the escalation of cases have put the world in multi- sectorial crisis. The provision of safe water supply, sanitation and waste management services is essential to protect human health in normal times as well as during epidemics. Provision of these services requires a wellorganized system in which a number of stakeholders are involved. Enhancing capacities of key stakeholders will assist them in taking appropriate precautions in effectively addressing any new challenges. The Front-Line Workers (FLWs)/Sanitation Workers play a crucial role in this period of crisis, and the need is to safeguard their health and safety first.

Considering this background and special request from Municipal Corporation of Greater Mumbai (MCGM), Regional Centre for Urban & Environmental Studies (RCUES) of All India Institute of Local Self Government (AIILSG), Mumbai had organized a series of Regional Specialized Web-Based Training Programmes on 'Health and Safety of Front-Line Workers / Sanitation Workers During and Post COVID-19' in the month of February 2021 for Solid Waste Management (SWM) workers of 24 municipal wards. These training programmes are supported by the Ministry of Housing & Urban Affairs (MoHUA), Government of India (GoI).

Key Objective

The key objective of these training programmes was to understand and address the challenges in ensuring health and safety of front-line workers (FLWs) / sanitation workers and service providers in sanitation at city level.

Participation

Total 3782 participants comprising Assistant Health Engineers, Health Supervisors and Solid Waste Management (SWM) Workers, from 24 municipal wards of MCGM, Mumbai from the state of Maharashtra participated in these training programmes. The following table shows the programme-wise details of the participants who attended the training programme–

Sr. No.	Date of the Training Programme	No. of Participants
1	6 th February 2021	1075
2	13 th February 2021	959
3	20 th February 2021	917
4	27 th February 2021	831
	Total	3782

Introduction



Ms. Neha Hardikar, Sr. Research Officer, RCUES, AIILSG, Mumbai addressing the participants.

Ms. Neha Hardikar, Sr. Research Officer, RCUES, AIILSG, Mumbai welcomed the distinguished trainers and the participants. Thereafter she talked about the objective and functions of the Institute and explained the objective of this training programme. She expressed thanks to the SWM Department, MCGM, Mumbai for providing this opportunity to impart training to SWM workers from 24 municipal wards at a time. She further said that expert trainers will provide valuable information regarding health and safety of SWM workers. She requested Ms. Utkarsha Kavadi, Director, RCUES, AIILSG, Mumbai to address the participants.



Ms. Utkarsha Kavadi, Director, RCUES, AIILSG, Mumbai addressing the participants.

Ms. Utkarsha Kavadi also welcomed the expert trainers and the participants. She also expressed thanks to the SWM Department of MCGM, Mumbai for giving the opportunity to interact with SWM workers through this virtual platform. She also extended thanks to the expert trainers and mentioned their background and expertise in the subject. She concluded her welcome address by encouraging the participants to take benefit from the training in order to face the day-to-day challenges in their work with confidence.

Ms. Neha Hardikar, Sr. Research Officer, RCUES, AIILSG, Mumbai and Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai jointly coordinated this series of web-based training programmes.



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

Technical Sessions

The first technical session on 'Public Health Aspects of COVID-19 and Emergency Preparedness and Response' was conducted by Dr. Vivek Pardeshi, Surveillance Medical Officer, National Polio Surveillance Project (NPSP), World Health Organization (WHO), Mumbai. Dr. Pardeshi explained the symptoms of COVID-19 pandemic and its progression pattern. He further spoke about the scenario of COVID cases across the country and stated that it is crucial

to understand the modes of transmission of the virus and its pattern of spreading. He said that the MoHUA, GoI has published info-graphics which describe the nine-common means of spread of the virus. He then explained the measures to be taken to reduce transmission of Corona virus. The measures are: (i) to keep physical distancing, quarantine for 14 days, (ii) to seek immediate health care, (iii) to avoid going to public areas and to wear masks when they are around other people. He further explained that it is essential to follow hygiene practices like wearing a mask, hand washing, and other measures prescribed as precautions against COVID-19. He also stated that in respect of the hand and respiratory hygiene measures the Ministry of Health & Family Welfare (MoHFW), GoI has published guidelines for hygiene measures to be observed to restrict further spreading of the virus. He further stated that the MoHFW, GoI's guidelines illustrate DO's and DON'T's for appropriate respiratory hygiene, appropriate use of mask and hand hygiene which are crucial to control spread of the virus. He emphasized that SWM workers have to take additional precautions after reaching home. SWM workers are at high risks as they directly handle COVID waste. Thus, they should strictly follow given measures to safeguard themselves and their families. He also spoke about the stigma attached to the person tested positive in this pandemic situation.



Dr. Vivek Pardeshi, Surveillance Medical Officer, NPSP, WHO, Mumbai addressing the participants.

He concluded his session by emphasizing on taking COVID vaccine. He also provided the information on COVID vaccine by stating that vaccination programme has started from 16th January 2021 at various centres and that the vaccine is safe and effective. MCGM, Mumbai will start giving vaccine to SWM workers and every worker should avail of this facility to ensure health and safety.

The next session on 'Safe Solid Waste Management during COVID-19' was conducted by Mr. Subhash Dalvi, Officer on Special Duty (SWM) and Chief Nodal Officer, Swachh Mumbai Prabhodhan Abhiyan (SMPA), MCGM, Mumbai. Initially he presented an overview of SWM workers, frontline workers such as doctors, medical staff, sanitation workers and significant role played by them during COVID times. He stated that SWM workers from 24 municipal wards were continuously working with high risk during COVID times. He further added that during COVID times, concerned municipal officials of MCGM, Mumbai conducted frequent meetings and discussions with multiple stakeholders involved in the process of preventive measures of COVID-19. He concluded his session by giving information of vaccine campaigns and necessity of taking this vaccine by front line workers / SWM workers.



Mr. Subhash Dalvi, Officer on Special Duty (SWM) and Chief Nodal Officer, Swachh Mumbai Prabodhan Abhiyan (SMPA), MCGM, Mumbai addressing the participants.

The next session on 'Safe Sludge Management (Open Drains) was conducted by Mr. Bhalchandra Salvi, former Executive Engineer, Mumbai Sewerage Disposal Project (MSDP), MCGM, Mumbai, Mr. Salvi commenced his session by explaining preventive measures to be taken at workplaces. He further talked on personal hygiene, hand hygiene, keeping social distance at work place, using masks and sanitizers, use of home made healthy food and pure drinking water etc., to maintain health and safety of sanitation workers. He explained in detail eight types of Do's and Don'ts which include using gloves, cleaning hands with soaps, social distancing, disinfecting of tools used for cleaning the open drains, prohibiting people to go near open drains. He concluded his session by focusing on the need of strictly observing prescribed preventive measures in order to maintain safety of sanitation workers.



Mr. Bhalchandra Salvi, former Executive Engineer, MSDP, MCGM, Mumbai addressing the participants.

The next session on 'Health, Safety and Welfare of Sanitation Workers' was conducted by Dr. Ajit Salvi, Executive Engineer, MSDP, MCGM, Mumbai. He began his session by focusing on individual perspective of SWM workers in terms of health and safety. He highlighted reasons of accidents of SWM workers at work place. He stated that accidents occur due to negligence and having casual approach towards work, unsafe conditions of work, absence of safety measures at work place, etc. He added that accidents at work place can be avoided by conducting regular safety drills, imparting knowledge of handling safety gears, avoiding shortcuts at work place and training the SWM workers. Further he talked about absenteeism of SWM works and their impact on their work. He mentioned that the reasons behind absenteeism at work place could be health issues, financial problems and family issues, etc. He further stated that good healthy life style is of utmost importance for a happy life and further added that according to the World Health Organization (WHO), individual with good physical, mental and social health can work effectively at work place. He elucidated that healthy diets, good thoughts, regular exercises, proper sleep, time management, financial planning, stress management and management of time after retirement are important facets to live a happy life. He encouraged the SWM workers to focus on these aspects. He concluded his session by mentioning measures to be taken by SWM workers at work place during and post COVID times.



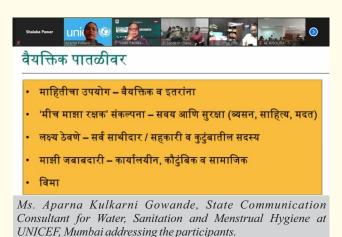
Dr. Ajit Salvi, Executive Engineer, MSDP, MCGM, Mumbai addressing the participants.

The last session on 'Way Forward - Post Training Action Plan' was taken by Mr. Anand Ghodke, WASH Officer, UNICEF, Maharashtra. He began his session by emphasizing on inevitability of online training during COVID time. The training provides knowledge of the subject and its effective implementation. He further stated that subsequent to training, follow up action needs to be taken at individual and institutional level. He said that the knowledge gained through training needs to be disseminated to others in family, friends and colleagues etc. He said that

along with this, other aspects relating to periodic training, review of work culture, change in protocol if needed, and availability of safety tools, health care and compilation of health data should be monitored and corrective measures should be taken whenever a deficiency is noticed. He summarized his session by stating that post training action plan is vital to assess the effectiveness of training in terms of way forward.



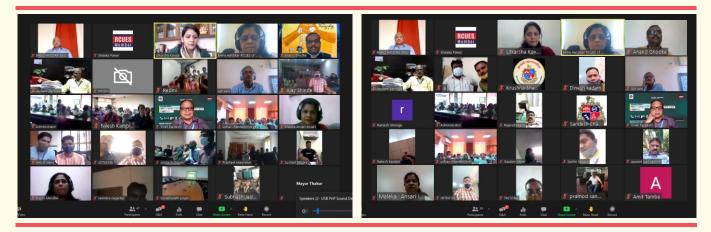
The same session was conducted by Ms. Aparna Kulkarni Gowande, State Communication Consultant for Water, Sanitation and Menstrual Hygiene at UNICEF, Mumbai in the third web-based training programme of the series.



Summing-up

After the technical sessions Question and Answer session was taken. Ms. Neha Hardikar, Sr. Research Officer, RCUES, AIILSG, Mumbai concluded these training programmes by proposing a Vote of Thanks to the expert trainers and the participants.

Glimpses of the Programmes



Active participation of solid waste management workers from 24 wards of Municipal Corporation of Greater Mumbai (MCGM) in the series of city specific web-based training programmes on 'Health & Safety of Front-line Workers / Sanitation Workers During and Post COVID-19' conducted in the month of February 2021, arranged with support from Solid Waste Management Department (SWM) of MCGM.



Active participation of solid waste management workers from 24 wards of Municipal Corporation of Greater Mumbai (MCGM) in the series of city specific web-based training programmes on 'Health & Safety of Front-line Workers / Sanitation Workers During and Post COVID-19' conducted in the month of February 2021, arranged with support from Solid Waste Management Department (SWM) of MCGM.



Regional Specialized Web-Based Training Programme on **'Role of Elected Representatives in response to COVID-19'**

10th - 11th February 2021

The key highlight of this web-based training programme was that the features of the best practices which emerged as effective in tackling COVID-19 and came to be known as Bhilwara Model and Dharavi Project were presented. These best practices serve as model to be replicated in other cities to control the disease.

Background

In January 2020, the World Health Organization (WHO) declared the outbreak of a novel coronavirus to be a public health emergency of international concern. Since then WHO declared it as a pandemic affecting more than 115 countries around the globe. With cases were rising steadily, it was realized that the Urban Local Bodies (ULBs) have a key role to play in tackling this unprecedented challenge and that leadership and involvement of elected representatives of the ULBs is going to be crucial in the coming days, to face post-COVID-19 challenges.

Importance of continued efforts on training and capacity building of stakeholders has been recognized, especially in order to face the challenges during this pandemic. Hence, as per various guidelines of the Government authorities, Regional Centre for Urban & Environmental Studies (RCUES) of All India Institute of Local Self Government (AIILSG), Mumbai has continued providing capacity building support through web-based tailor-made training programmes for the respective target groups. It also acts as a platform for various stakeholders to raise queries and also to share their experience and knowledge. It needed an earnest attempt to encourage the participants through the web-based platform instead of face to face training programmes after the extended lockdown due to COVID-19 and recent pandemic situation across the country. Considering this background, RCUES of AIILSG, Mumbai had organized a Regional Specialized Web-Based Training Programme on 'Role of Elected Representatives in Response to COVID-19 on 10th & 11th February 2021 between 11.30 to 13.00 hrs. This training programme was supported by the Ministry of Housing & Urban Affairs (MoHUA), Government of India (GoI).

Key Objective

The key objective of the training programme was to discuss role of municipal elected representatives in addressing post pandemic challenges at city level.

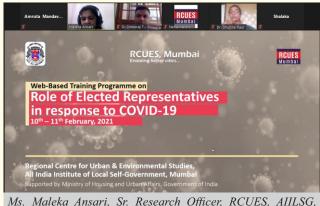
Participation

In all, 22 participants comprising President, Elected Representatives, Sanitary Inspectors, Community Organizers from Maharashtra, Goa, Gujarat and Rajasthan attended this web-based training programme.

Introduction

Ms. Maleka Ansari, Sr. Research Officer, RCUES of AIILSG, Mumbai started the web-based training programme by welcoming the distinguished trainers and the

participants. She explained importance of the role of elected representatives and its significance in tackling the challenges of the pandemic in cities. She added that the RCUES of AIILSG, Mumbai is taking efforts in experience sharing through expert trainers across the western region and encouraging the participants to use this platform to raise and resolve their queries and also to share their experience and knowledge with their counterparts in other cities.

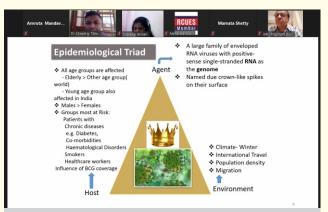


Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG Mumbai addressing the participants.

Technical Sessions

The first session on 'Public Health Aspects of COVID-19' was delivered by Dr. Shreeraj Talwadekar, Assistant Professor, Department of Microbiology, KEM Hospital, Mumbai. He started his session by depicting the numbers of cases affected due to Corona virus across the country to indicate the spread of the disease. He explained the clinical signs of COVID-19 like cough, cold, and fever, difficulty in breathing, fatigue, expectoration and loss of smell and taste and its progression pattern which leads to public health concern. He further explained preventive measures by explaining cough etiquette, hand hygiene, facial hygiene, social distancing, correct and consistent use of masks and PPE, safe waste management and surfaces cleanliness to be taken to prevent the infection. He said that infection can be controlled through early diagnosis and proper treatment of

COVID cases. Thereafter he talked on significant role of elected representatives in controlling and preventing the disease by knowing the disease and understanding its transmission. It is incumbent upon the elected representatives to create awareness amongst the citizens for wearing masks, ensuring physical distance in shops, malls, public places, ensuring availability of soap, water and sanitizers with 70% alcohol, ensuring safe waste disposal in their communities etc. He also talked on stigma attached to COVID-19 and measures that are being taken to tackle it. He explained SOPs of preventive measures for shopping malls, restaurants, religious places etc. He concluded his session by explaining the current government guidelines prescribed by Government of India to take preventive and curative measures.



Dr. Shreeraj Talwadekar, Assistant Professor, Department of Microbiology, KEM Hospital, Mumbai addressing the participants.

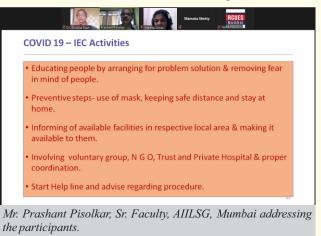
The next session on 'Advisory of AYUSH for Meeting Challenges arising due to Spread of Coronavirus (COVID-19) in India' was delivered by Dr. Shubha Raul, former Mayor of Mumbai and Member of AYUSH Task Force, Government of Maharashtra (GoM). She explained preventive measures such as personal hygiene, hand hygiene, respiratory hygiene and social distancing etc. to check the spread of COVID-19 in the community. She highlighted efficacy of Ayurveda medicines during the post pandemic situation. She noted that they help in enhancing

immunity and maintaining a healthy life. She made mention of the AYUSH self-care guidelines for preventive health measures and advancing immunity with special mention of respiratory health. She further mentioned many Ayurvedic and Homeopathic medicines which are useful as a preventive measure. She also emphasized importance of physical exercises, breathing exercise to boost the immunity. She concluded her session by highlighting the substantial role of elected representatives in preventive measures of the disease. She concluded that the elected representatives can work as a task force in respect of AYUSH guidelines.

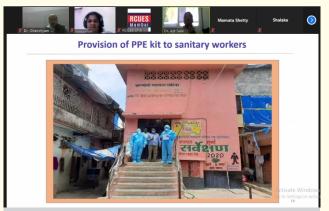


Dr. Shubha Raul, former Mayor of Mumbai, and Member of AYUSH Task Force, GoM addressing the participants.

The next session on 'Role of Elected Representatives in Response to COVID-19' was delivered by Mr. Prashant Pisolkar, Sr. Faculty, AIILSG, Mumbai. He explained the importance of IEC activities for the awareness of preventive measures among citizens, involving local representatives and NGOs during and post pandemic situation. He further explained the active role of elected representatives in identifying COVID patients in their respective municipal wards to provide them required assistance in getting treatment facility in health centres and ensuring cost effective testing facility at local level. The elected representatives also can play a key role in number of ways, including helping COVID patients to get admitted in quarantine centres or hospitals in their wards, ensuring availability of ambulance at reasonable rates, arranging treatment facilities for non COVID chronic patients and looking after the last rites of arrangements of dead bodies. At the end, he explained that the provision of additional budget can be made for any emergency management by municipal authorities to save the lives of citizens during such situations.



The session on 'Prevention and Control in Addressing Challenges at Community Level' was taken by Dr. Ajit Salvi, Executive Engineer, Mumbai Sewerage Disposal Project (MSDP), Municipal Corporation of Greater Mumbai (MCGM), Mumbai.



Dr. Ajit Salvi, Executive Engineer, MSDP, MCGM, Mumbai addressing the participants.

He explained various activities to be taken at individual as well as community level to control the spread of the virus and address community level challenges and dispel myths and misconception about COVID-19. He further talked about responsibilities of ULBs related to water supply and sanitation through water treatment and distribution, maintenance of WTPs and distribution network, maintenance of sewer lines, public and community toilets etc. He emphasized that preparedness and response activities should be conducted in a participatory, community-based ways that are established and regularly improved according to community feedback by identifying and responding to concerns, rumors and misinformation. He also added that changes in preparedness and response interventions should be developed based on community perspectives. He further said that after understanding the community perspective, responsive and transparent messages in local language should reach the community through trusted channels of communication, using community-based networks and also through elected representatives. He concluded his session by explaining post COVID management of water supply and sanitation services through certain recommendations and those households should be encouraged to maintain sanitation in their toilets. He further said that monitoring of fecal sludge management chain needs to be strengthened.

ULBs' Presentations

After the technical sessions, the virtual platform was opened for the best practices to be shared. The idea of sharing and discussing the best practices was to provide opportunities to the participants of other cities to gain information for replication and adoption in their cities. Dr. Ghanshyam Chawla, Dy. Chief Medical Health Officer, Bhilwara Municipal Council, Rajasthan explained how the Bhilwara District fought back against COVID-19 and became the best model in the State of Rajasthan. He said that, initially Bhilwara district was an epicentre of new coronavirus in Rajasthan until aggressive containment measures were taken by Bhilwara Municipal Council to control the spread of Coronavirus. The ruthless containment strategy followed by Bhilwara district consisted of strict imposition of curfew, mass screening, identification of potential clusters etc. Around 2000 team members carried out door-to-door screening of around 28 lakhs population across Bhilwara district and enforced home quarantine to those who were found symptomatic. He further explained that Bhilwara district administration developed a three pronged strategy to combat the cluster spread. The first step taken by Bhilwara was effective implementation of curfew, sealing the borders of containment zones and ensuring zero vehicular movements. The second step taken was identifying potential clusters and carrying out intensive mapping of contacts, isolating high risk people and the third step taken was extensive screening of the entire population of Bhilwara district. After the three pronged strategy, quarantine centres were developed at private hospitals, hotels and resorts to ensure accessibility of health facilities at a large scale.



At the end, he explained the significant role played by elected representatives in awareness generation for proper use of mask and gloves, sanitization and implementation of social distancing, disposal of bio medical waste as per BMW Rules 2016 etc. As Bhilwara proved to be a model in fighting against corona virus, other states are trying to replicate containment strategy used by Bhilwara district to curb the spread of Coronavirus in their cities.

Another best practice on COVID-19 Intervention, field experiences from Dharavi, Mumbai was explained by Mr. Anand Jagtap, former Officer on Special Duty (OSD), MCGM and Sanitation Expert, Mumbai.



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

He started his presentation by explaining major risk factors such as higher transmissibility, higher prevalence of infectious diseases, higher concentration of marginalized, migrants and forcibly displaced population, low awareness on certain prevention behaviors for the people living in informal settlements. Thereafter he explained 'Flush the Virus' Project which was conceptualized with two major interventions namely (i) risk communication and community engagement and (ii) Infection prevention and control. The objectives of Flush the Virus project were to create an enabling environment, ensuring availability of WASH services, development of SOPs, check lists and training materials and leverage partnerships to mobilize resources. He explained that activities under Risk Communication and Community Engagement (RCCE) are carried out by social messaging through megaphone on 100% mask use, emphasizing on physical distancing and respiratory hygiene, demonstration of hand washing techniques and installation of IEC materials in key areas. He concluded his presentation by depicting photos of COVID-19 awareness programme showing coordinators communicating with public about key measures for safety against COVID-19 transmission. He explained various measures taken to restrict the spread of the disease. These measures can be replicated in other cities as a bets practice.

Summing-up

At the end of the technical sessions, trainers replied to the queries raised by the participants, followed by proposed Vote of Thanks by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai to the trainers and the participants.

Regional Specialized Web-Based Training Programme on **'Disaster Management at ULB Level'**

17th - 18th February 2021

The key highlight of this web-based training programme was that the participants gained knowledge about vigilance and preparedness required to be maintained in order to tackle the disasters and the mitigation measures to be taken during disasters. The participants were encouraged and emphasized to develop Emergency Operation Centre (EOC) in their respective cities to tackle the disasters.

Background

The Disaster Management Act, 2005 (DM Act 2005) lays down institutional set up, coordination measures and the mechanism for effective Disaster Management (DM) at national, state, district and local levels. As mandated by this Act, the Government of India created a multi-tiered institutional system consisting of the National Disaster Management Authority (NDMA) headed by the Hon'ble Prime Minister of India and similar authorities at State level and district level. In every ULB, there is supposed to be one nodal agency, for coordination of various activities relating to disaster management, which is referred to in the plan as 'Disaster Management Department' (DMD). The institutional arrangements have been set up consistent with the paradigm shift from the relief-centric approach of the past to a proactive, holistic and integrated approach for Disaster Risk Reduction (DRR) by way of strengthening disaster preparedness, mitigation and emergency responses. COVID - 19 pandemic impacted nations across the world, disrupting lives, economies and societies. Outbreak of the virus and its rapid spread brought the whole country under the shadow of lockdown. Most of the cities of our country were not completely prepared for fighting against such a massive calamity.

Considering this background, Regional Centre for Urban & Environmental Studies (RCUES) of All India Institute of Local Self Government (AIILSG), Mumbai had organized a Specialized Web-Based Training Programme on 'Disaster Management at ULB Level' on 17th & 18th February 2021 at 11.30 to 13.00 hrs. 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 is to develop the measures to tackle the disasters occurred during COVID times and develop disaster preparedness plan of action at ULB level.

Participation

In all, 77 participants comprising City Coordinators, Control Room Operators, Firemen, Fire Officers, Fire Superintendents, Municipal Engineers, Audit Officer, Office Superintendents, Head of the Department of Fire Departmentof Maharashtra attended this web-based training programme.

Introduction

This web based training programme commenced with introduction and welcoming the distinguished trainers and

the participants by Mrs. Maleka Ansari, Sr. Research Officer, RCUES of AIILSG, Mumbai. She explained the objective of the web-based training programme by elucidating the significance of preparedness and mitigation strategies to tackle the disaster and ensure safety to the public and mitigating the adversities. She gave introduction of the trainers which was followed by technical sessions.



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

Technical Sessions

The first session on 'Overview of Disaster Management' was conducted by Ms. Rashmi Lokhande, Chief Officer (i/c), Disaster Management Department, Municipal Corporation of Greater Mumbai (MCGM). Mumbai. She commenced her session by saying that Mumbai being a coastal city is vulnerable to various hazards, including flooding. She further stated that according to a UN report, more than 50% of 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 tackle the disasters. She 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, preparedness and mitigation. She highlighted the importance of community participation in disaster management and 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 lessening vulnerability of people and property, judicious management of land and the environment, and improved preparedness for facing adverse events. She further spoke about institutional development required in disaster management. The Disaster Management Act 2005 provides for legal and institutional framework for disaster management in India at the National, State and District level. She said that IT enabled systems are very effective in disaster management and added that MCGM, Mumbai has installed 60 automatic rain gauges at 58 locations, which transmit rainfall data to the Disaster Control Room of MCGM every 15 minutes. Many of the rain gauges have been installed at Fire Brigade stations as they are the first respondents during disasters and are on 24-hour alert. The rain gauges also have a console capable of giving an audible alarm if preset rainfall intensity exceeds 10 mm in 15 minutes.



Ms. Rashmi Lokhande, Chief Officer (i/c), Disaster Management Department, MCGM, Mumbai addressing the participants.

She further said that IT enabled documentation plays a vital role in disaster management. She concluded her session by citing example of Mumbai Development Plan (DP) 2034 which envisions mapped hazardous vulnerable locations, flood prone areas and rescue transport routes through IT enabled system.

The next session on 'Disaster Mitigation and Prevention with reference to COVID-19' was conducted by Dr. Shailesh Mohite, HOD, Forensic Dept., Nair Hospital, Mumbai. He started his session by briefly talking on COVID and its symptoms including its prevention and mitigation. He explained the steps of mitigation with reference to COVID 19. He added that the preventive measures like social distancing, wearing of masks, personal sanitization reduces the risk. He spoke about the steps of mitigation in COVID -19. They include early detection of cases from community, provision of medicines, supportive treatment, role of ICUs and early CT scan X rays etc. He further explained how to develop an organization's preparedness plan in terms of social distancing, use of mask, hand hygiene, transportation of employees in a safe manner etc. He also explained conducting risk assessment through identification of areas at the work places, where there is a possibility of virus transmission through potential interactions among workers, customers, visitors, etc. He concluded his sessions by focusing on vaccination and improved health care infrastructure at district level as a preventive measure to bring down the risk of Coronavirus.



The next session on 'Disaster Management Cell at ULB Level – Experience Sharing of Mumbai' was conducted by Ms. Rashmi Lokhande, Chief Officer (i/c), Disaster Management Department, MCGM, Mumbai. She started her session by stating legal and regulatory provisions of

the Disaster Management Act. She said that in the year 2011, Greater Mumbai Disaster Management Authority was constituted in exercise of the powers conferred by subsections (1), (2) and (4) of section 25 of the Disaster Management Act, 2005 (53 of 2005) and rule 2 of the Maharashtra District Disaster Management Rules by appointing Municipal Commissioner of Municipal Corporation of Greater Mumbai as ex-officio Chairman of the Authority. In the year 2018, as per the Government Resolution and the orders of the Hon'ble High Court, the District Disaster Management Authorities for the Mumbai City and Mumbai Suburban were constituted. Later she explained the functions of Disaster Management Department which she described as being the single-point source for all activities related to disaster management, hazard vulnerability and risk assessment, coordination for prevention, preparedness and mitigation, coordination for recovery and reconstruction, arrangement of temporary transport for victims, coordination for setting up temporary shelters. She further explained the Emergency Operation Centre (EOC) established at Disaster Management Department of MCGM, Mumbai. This Centre is functional 24X7, equipped with the latest communication systems and early warning system. The Control Room contains 58 hot lines connected with various stakeholders, VHF network with 53 various stakeholders etc.

She further explained the role of Ward War Room (WWR) by mentioning that existing Ward Disaster Control Rooms are additionally act as COVID War Room from June 2020 and are working in all 24 Administrative wards on 24x7 basis. A dedicated land line number is assigned to Ward War Room. Each Ward War Room is provided with 15 to 20 ambulances for transporting patients from their residence to COVID Care Centres (CCCs) or COVID hospitals. She further mentioned about various actions taken by the EOCs and WWR, if any person is found positive. She explained the Standard Operating Procedures (SOPs), in which she discussed the methodology to decentralize Interactive Voice Response (IVR) system during pandemic. She also emphasized on importance of coordination meetings with several stakeholders like police, fire brigade, civic authorities, NGOs etc. for effective functioning of EOCs. She also explained the Emergency Support Functions (ESFs), in

which transport is a crucial part. She also talked on Disaster Recovery Site at Parel in Mumbai which is a replica of the main Emergency Operations Center situated at MCGM, Fort, Mumbai. She concluded her session by stating that community participation is significant feature in disaster management.

On the second day, the session on 'Fire Safety' was conducted by Mr. Subhash Rane, former Divisional Fire Officer, Mumbai Fire Brigade, MCGM, Mumbai. He began his session by explaining the responsibilities of statutory authorities in maintenance of fire services, which are vested with local self-government institutions as per the provisions made in respective statutes. He later spoke about the National Building Code in which Part 4 contains Fire and Life Safety provisions and important Indian Standards (IS) of fire extinguishing systems, smoke detection system, electric installations and safety colors safety signs, fire protection safety signs and LPG gas installations etc. He highlighted importance of Building Bye-laws which mandate construction of buildings in sound and safe manner. They lay down guidelines to be followed by architects / engineers involved the building layout and plans to ensure safety. Thereafter he explained provisions of the Maharashtra Fire Prevention and Life Safety Measures Act 2006 & Maharashtra Fire Prevention and Life Safety Measures Rule 2009 and their effective implementation. He showed images of several buildings catching fire.



Mr. Subhash Rane, former Divisional Fire Officer, Mumbai Fire Brigade, MCGM, Mumbai addressing the participants.

He also discussed fire protection plan and said that fire drills are periodically conducted. It is very important to have a fire safety plan to prevent and extinguish any fire in the building with details about the precaution to be observed by each occupant, he said. Among other things, telephone numbers of all emergence services are indicated in the plan. While explaining fire and life safety audit, he said that it is required to be carried out for all buildings having a height of more than 15 meters. Such audits shall preferably be conducted once in 2 years by a third party auditor having requisite experience in fire and life safety inspections. He concluded his session by explaining fire prevention measures such as safety audit, performance assessment, education and training, implementation of safety standards, etc. to minimize the number of accidents.



Dr. Prakash Dongre, Associate Professor, N. K. College Malad and Faculty for MCGM and Garware Institute for Post Graduate Diploma in Disaster Management, Mumbai addressing the participants.

The next session on 'Disaster Preparedness' was taken by Dr. Prakash Dongre, Associate Professor, N. K. College Malad and Faculty for MCGM and Garware Institute for Post Graduate Diploma in Disaster Management, Mumbai. He commenced his session by talking on preparedness before occurence of disasters with a view to avoid loss of life and property. He explained the Disaster Risk Management Cycle and elaborated upon the Reactive Disaster management i.e. Recue, Relief and Proactive Disaster management with Prevention and Preparedness as the key

factors. He spoke about legal frameworks formulated and guidelines issued at national, state, district and ULB level to develop disaster resilient cities across the country. He added that considering the importance of disaster management as a national priority, Government of India set up a High-Powered Committee (HPC) in August 1999 and a National Committee after the Gujarat Earthquake, for making recommendations on the preparation of Disaster Management Plans and suggesting effective mitigation mechanisms. The Tenth Five-Year Plan document also had, for the first time, a detailed chapter on disaster management. The Twelfth Finance Commission also mandated review of the financial arrangements for disaster management. He further said that the Government of India enacted the Disaster Management Act 2005, which envisaged the creation of National Disaster Management Authority (NDMA) and State Disaster Management Authorities (SDMAs) to provide for and implement a holistic and integrated approach towards disaster management across the country. Further, he discussed disaster preparedness tools such as community preparedness, early warning systems, vulnerability and capacity assessment, contingency planning and logistic preparedness. He spoke about important communication systems like social media, cell phones, satellite phones, and police scanners etc. which are effective support systems in tackling disasters. Lastly, he talked on emergency disaster preparedness and development of emergency plans in coordination with other concerned stakeholders.

The next session on 'Community Resilience Indicators' was taken by Mr. Rajendra Lokhande of the Disaster Management Department, MCGM, Mumbai. He started his session by saying that community is a first respondent in any disaster situation and community resources are the chief means in forming community's resilience. He explained the difference between hazard and vulnerability and also elaborated on risk triangle. The risk triangle involves hazard, vulnerability and exposure. He mentioned that presence of any of these elements increases risk. He said that disaster management is necessary in order to save lives, minimize damages and bring normalcy. He also discussed disaster management cycle and role of government authorities in disaster management with a view to build a proactive and technology driven strategy for effective response to disasters. He explained the importance of community resilience which includes awareness of vulnerabilities and planning for strategies to protect continuation of important services when protective measures do not work as anticipated. A major goal of a resilient community is to minimize the occurrence of disaster, he said. He concluded his session by explaining contents and use of survival kit which has to be kept ready before occurrence of any emergency.



AWARNESS : Educational 3 D Auditorium Disaster Information Art Gallery



Mr. Rajendra Lokhande, Shift Incharge of the Disaster Management Department, MCGM, Mumbai addressing the participants.

Summing-up

After the technical sessions, the feedback was taken from the participants, followed by Vote of Thanks by Ms. Maleka Ansari, Sr. Research Officer, RCUES, AIILSG, Mumbai to the trainers and the participants.

Snapshot of Appreciations

From: Rajendra Lokhande <lokhanderaj15@gmail.com> Date: Sat, Mar 20, 2021 at 1:53 PM Subject: Appreciation Letter. To: <rcuestraining@aiilsg.org>, <maleka.ansari@aiilsg.org>

To, Ms. Utkarsha Kavadi, Director, RCUES of AIILSG Mumbai.

Sub : Appreciation Letter.

Respected Madam,

This is reference to express our appreciation for the support that your centre has provided through web based training program on Disaster Management at ULB Level organised on 17th & 18th February, 2021 for the Municipal Officials, Elected Representative and NGO by creating a learning platform and organising valuable discussion. This Workshop of Disaster Management at ULB Level will definitely be beneficial for the Community. Such types of workshops should be organised in future so that the whole city will benefit from this workshop.

Thanking You,

Warm Regards,

Yours sincerely

Rajendra Ramchandra Lokhande, Disaster Management Dept. MCGM



RCUES Mumbai @RCUESMumb... · 06 Feb RCUES, Mumbai with SWM, MCGM conducted 1st batch of online training to SWM workers of @mybmcSWM. More than 1100 participants attended from 24 wards of @mybmc. Thanks to @WHO @UNICEFIndia and MCGM for great response and participation @Utkarsha_Kavadi @NehaHardikar1



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